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DIRECTORY FOR CORRESPONDENCE

Academic Work ..... *Vice President for Academic Affairs*
Admission to the College ..... *Director of Admissions*
Admission to the Graduate School ..... *Dean of the Graduate School*
Alumni Affairs ..... *Director of Alumni Affairs*
Applications for Admission, Catalogs ..... *Director of Admissions*
Charges and Payments of Bills ..... *Business Manager*
Gifts and Bequests ..... *Vice President for Development*
Houslng for Women ..... *Dean of Women*
Personal Welfare, Health of Students, Housing (Men) ..... *Dean of Students*
Scholarships, Workships and Loans ..... *Director of Student Financial Aid*
Transcripts—Academic Records—Veterans Affairs ..... *Registrar*

LOCATIONS AND TELEPHONES

All offices are located in Speed Hall unless otherwise noted. The telephone number for Union College is (606) 546-4151. The extensions listed will contact you with the appropriate office.

President ..... Extension 111
Vice President for Academic Affairs ..... Extension 124
Dean of the Graduate School ..... Extension 112
Business Manager and Treasurer ..... Extension 115
Dean of Students ..... Extension 118
Dean of Women . . . Pfeiffer Hall ..... Extension 141
Office of Public Information ..... Extension 110
Office of Admissions ..... Extension 117
Office of Development ..... Extension 195
Office of Financial Aid ..... Extension 171
Registrar ..... Extension 114

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April, 1975

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BARBOURVILLE, KENTUCKY 40906

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Mahlon A. Miller,
President of the College

A College With a Mission

Union College, affiliated with The United Methodist Church, is a nonsectarian coeducational institution serving students without regard to race, creed, or color. The college emphasizes stimulating teaching and a concern for individual needs. Classes are small, the curriculum is flexible, opportunities for counseling and guidance are abundant, and widespread student involvement in institutional governance aids in the development of responsible leadership.

While it is recognized that Union College cannot be all things to all people, the institution provides a variety of educational programs. Union College offers the following types of educational alternatives: updated and restructured liberal arts bachelor's degree programs; professional and pre-professional bachelor's degree curricula; Appalachian Regional Studies; occupational-oriented certificate and associate degree programs; master's degree curricula in education; and special non-degree continuing education for upgrading occupational skills and/or personal enrichment.

The institution's primary mission is to help improve the quality of life and living conditions in Appalachia by serving the people of Appalachia. The college offers a variety of quality programs that are attractive to a broad spectrum of students, provides for all students the basis for understanding the distinctive features of Appalachia, provides students with alternative approaches to learning and acquiring a degree, structures the curricula in such a manner as to implement the career ladder concept, assists students in planning and preparing for life and for careers, and delivers services directly to the people of the nearby region.

The campus atmosphere stimulates intellectual curiosity and academic competence, encourages commitment to Christian ideals, and supports the development of the spiritual, social, and physical resources needed to live creatively in a changing world.

HISTORY OF UNION COLLEGE

4—History of the College

Union College was founded in 1879 by a group of progressive citizens of Barbourville who formed a stock company and secured the main part of the present campus. In 1880 the first building was formally opened on the site of what is now known as the Classroom Building.

The college was purchased by the Kentucky Conference of the Methodist Episcopal Church in 1886, and Daniel Stevenson, President of Augusta Collegiate Institute at Augusta, Kentucky, was made President of the reorganized institution. A major bequest from Mrs. Fanny Speed led to the construction of Speed Hall, Stevenson Hall, and the Classroom Building.

The college department was discontinued in 1908 and for eight years the institution was maintained as a Junior College, an academy, and an elementary school. It became a *bona fide* college again in the Presidency of Ezra T. Franklin, who inaugurated a program of development during which the Memorial Gymnasium and a home for the President were built, and the invested funds of the college were materially increased. In 1927 the College was accredited by the University of Kentucky as a four-year college of A grade.

President John O. Gross emphasized the improvement of the curriculum and the building of a strong faculty. His ambition was to see Union College fully accredited. In 1931 it was accredited by the University Senate of the Methodist Episcopal Church, and in 1932 full accreditation was realized when it was made a member of the Southern Association of Colleges and Schools. The Board of Regents of the University of the State of New York placed Union College on its accredited list in 1937. During this administration, land adjacent to the campus was purchased, a maintenance building was erected, and the financial structure was reorganized.

In Conway Boatman's twenty-one years of leadership, the college achieved marked progress in both its educational and plant improvement programs. Seven new buildings were completed and others were enlarged. The curriculum was expanded, endowment funds were increased, and a markedly improved program of faculty salaries and benefits was adopted.

Mahlon A. Miller was elected to the presidency in 1959. In 1960 a Master of Arts in Education degree program was introduced and plant expansion continued with the development of College Park, a faculty residential area, followed by the construction of additional student housing, a physical education building and a student center. The latest addition, a science center, was completed in 1973.

The college has always accepted a special mission to Appalachia, a thrust that is now being strengthened with unique academic programs based on regional characteristics, expanded student financial aid, student community service projects, and new career-oriented curricula. As the college moves toward its centennial, it is expanding and enriching its service to Appalachia while at the same time fulfilling the needs of the many students from other states who come to Union College for an education.

Mahlon Miller Science Center

Location, Campus and Buildings

Union College is located in Barbourville, a residential town of 3,500, on U.S. highway 25E halfway between Lexington, Kentucky, and Knoxville, Tennessee. The historic Wilderness Road runs along the eastern edge of the campus. The Cumberland Gap National Historical Park is thirty-five miles away. The Doctor Thomas Walker State Park is four miles from the campus and in adjoining counties are the Cumberland Falls State Park, the Levi Jackson State Park, and the Pine Mountain State Park.

The county seat of Knox County, Barbourville is served by Greyhound buses enroute to Knoxville, Lexington, Louisville, Cincinnati, and Harlan. The London-Corbin Airport, approximately thirty miles from the campus, is served by the Piedmont Airlines.

On one of the most picturesque campuses of the South, Union College is proud of its Georgian colonial buildings. Shaded by overhanging elms, the red brick buildings give the campus a majestic charm of dignity and beauty.

Speed Hall (Administration Building), 1897-1905. A gift from the estate of Mrs. Fanny Speed of Louisville, Ky. Her bequest also partially financed the building of the Classroom Building and Stevenson Hall.

Classroom Building (formerly the Administration Building), 1907.

Stevenson Hall—Men's Dormitory, 1907. Wings added 1956.

Dramatic Arts Center, (formerly Gymnasium), 1919; remodeled 1965.

Baldwin Place, the home of the President, 1925. The gift of Mr. and Mrs. F. E. Baldwin, Elmira, N. Y.

Maintenance Building, 1938, equipped by a gift from the estate of Robert Norton, New Albany, Indiana.

Abigail E. Weeks Memorial Library, 1941. Furnished by a gift from Mrs. Abbie E. Stewart.

Pfeiffer Hall—Women's Dormitory, 1942. Wing added 1960. The original wing was a gift from the estate of Mr. and Mrs. Henry Pfeiffer of New York City.

Home Economics Building, 1946; remodeled 1966.

Conway Boatman Chapel and Fine Arts Building, 1949.

College Courts—Residences for married students, 1954. Expanded in 1964.

Data Processing Center, 1973.

Physical Education Building, 1964, including the Swimming Pool, 1957.

Lakeside Residence Hall, Men's Dormitory, 1964.

Student Center, 1964.

College Park, 1960. Faculty residential area.

Langford Apartments, 1962. Gifts from the estates of Miss Mary Kyle Dugan and Mrs. Mary Gilbert Langford in memory of Mr. and Mrs. George Langford. Housing for faculty and staff.

Environmental Education Center, Cumberland Gap National Historical Park, Middlesboro, 1970.

Mahlon Miller Science Center, 1973.

CALENDAR 1975-76

Summer Session 1975, First Term

June 1, Sunday	Dormitories open, 8 a.m. First meal served in college dining hall, 5 p.m.
June 2, Monday	Registration for first term, 9 a.m.
June 3, Tuesday	Classes begin 7:30 a.m.
June 4, Wednesday	Last date to register for first term and last date to apply for August 1975 graduation.
June 27, Friday	Last date to drop a course.
July 3, Thursday	First term ends, 4 p.m.

Summer Session 1975, Second Term

July 7, Monday	Registration for second term, 9 a.m.
July 8, Tuesday	Classes begin, 7:30 a.m.
July 9, Wednesday	Last date to register for second term.
August 1, Friday	Last date to drop a course.
August 8, Friday	Summer Session Commencement, 10:30 a.m. Last meal served in college dining hall, 12 noon. Dormitories close, 4 p.m.

Fall Term 1975

August 30, Saturday	Faculty Conference, 9 a.m.
August 31, Sunday	Dormitories open for all students, 8 a.m.
	Orientation for new students, 1 p.m.
September 1, Monday	Orientation for new students, 9 a.m.
September 2, Tuesday	Orientation and counseling for new students, 8 a.m.
	Registration for returning students, 8 a.m.
	Registration for new students, 1 p.m.
September 3, Wednesday	Classes begin (MWF week), 8 a.m.
September 6, Saturday	Graduate classes begin, 8 a.m.
	Graduate School Registration, 1 p.m.
September 13, Saturday	Last day to add a class or apply for graduation for January 1976.
October 20, Monday	Mid-semester grades to be reported to Registrar, 9 a.m.
October 24, Friday	Founders Day Convocation, 10:20 a.m.
November 5, Wednesday	Last day to drop a course or elect a course for Cr/NCr.
November 7, Friday	Pre-registration for January term in Registrar's Office.
November 27, Thursday— November 30, Sunday	Thanksgiving Vacation.
December 19, Friday	Last day of class for undergraduates.
December 20, Saturday	Last day of class for graduate classes, 12 noon.
	Last meal served in dining hall, 12 noon.
	Dormitories close for Christmas vacation, 5 p.m.
December 23, Tuesday	All final grades due in Registrar's Office, 12 noon.

January Term 1976

January 4, Sunday	Dormitories open, 8 a.m.; Late registration for January term, 3 p.m.
January 5, Monday	Classes begin, 8 a.m.
January 9, Friday	Last date to elect a course for Cr/NCr.
January 23, Friday	January term ends, 4 p.m.

Spring Term 1976

January 25, Sunday	Dormitories open for students who have not attended January term, 8 a.m.
January 26, Monday	Registration for returning students, 8 a.m.; Orientation for new students, 8 a.m.; Registration for new students, 1 p.m.
January 27, Tuesday	Classes begin (MWF week) 8 a.m.
January 31, Saturday	Graduate classes begin, 8 a.m.; Graduate School Registration, 1 p.m.
February 7, Saturday	Last day to add a class or apply for graduation for May 1976.
March 20, Saturday	Mid-semester marks reported to Registrar, 12 noon. Spring vacation begins after last class. Last meal served in dining hall at 5 p.m.
March 21, Sunday	Dormitories close for spring vacation, 12 noon.
March 28, Sunday	Dormitories open, 8 a.m.; First meal served in dining hall, 5 p.m.
March 29, Monday	Classes resume, 8 a.m.
March 31, Wednesday	Last day to drop a course and last day to elect a course for Cr/NCr.
May 6, Thursday	Honors Day Program, 10:20 a.m.
May 13, Thursday	Final grades due for graduating seniors.
May 16, Sunday	97th Annual Commencement, 2:30 p.m.
May 18, Tuesday	Last day of classes for non-graduates, 4 p.m.; Last meal served in dining hall, 5 p.m.
May 19, Wednesday	Dormitories close, 12 noon.

Summer Session 1976, First Term

June 6, Sunday	Dormitories open, 8 a.m.; First meal in dining hall, 5 p.m.
June 7, Monday	Registration for first term, 9 a.m.
June 8, Tuesday	Classes begin, 7:30 a.m.
June 10, Thursday	Last day to register for first term and last day to apply for August 1976 graduation.
July 2, Friday	Last day to drop a course.
July 9, Friday	First term ends, 4 p.m.

Summer Session 1976, Second Term

July 12, Monday	Registration for second term, 9 a.m.
July 13, Tuesday	Classes begin, 7:30 a.m.
July 15, Thursday	Last day to register for second term.
August 6, Friday	Last day to drop a course.
August 13, Friday	Summer Commencement, 10:30 a.m.; Last meal in dining hall, 12 noon; Dormitories close, 4 p.m.

STUDENT LIFE . . .
GENERAL INFORMATION

In matters of social policy Union College is guided by the Social Creed of The United Methodist Church.

Religious Life

Union College takes seriously its identity as a church-related institution, and is concerned that its students grow in their awareness of the value of a vital Christian faith, as well as in their awareness of academic excellence. In this concern, Union College seeks to be faithful to John Wesley's affirmation that a whole person is one who unites knowledge with vital piety.

Worship and other religious services are held on campus twice weekly, are ecumenical in nature, and utilize the talents of the campus minister and other clergy, faculty and students. A vespers service, a prayer breakfast, and an open-house, which provides a setting for informal discussion of and sharing opinions about issues which are of interest to students who are seeking to grow in their understanding of Christianity, are held weekly. A celebration of the Lord's Supper is held monthly. In addition, the Wilson-Gross Lectures and the "Faith and Life Week" seek to bring outstanding speakers to the campus to discuss the Christian faith. The Religious Life Committee, composed of students, faculty, and local clergy, works with the Campus Minister as an advisory group to insure that the religious life programs meet the needs of the students and campus community. From time to time, various individuals, groups, music ensembles, and films are scheduled to enrich both the religious and cultural life of the college community.

Students are encouraged to worship regularly in the church of their choice and to participate in the various denominational and faith-oriented groups on campus and in the community.

Social Life

Students are encouraged to accept every legitimate opportunity to engage in social functions. The faculty emphasizes the value growing out of well-directed social activities. Student organizations, the faculty and local churches make desirable contributions to the promotion of social life. The Director of Student Activities is responsible for the initiation and direction of a comprehensive program of student social and recreational activities. All social functions are subject to rules and regulations of the college.

Concerts of exceptional merit are given throughout the school year by students in the School of Music and by the members of the music faculty, who are all performing artists.

Union College brings to the campus outstanding artists, performers, lecturers and entertainers. Their programs are planned by a General Assembly Program Committee and are given during assembly hours and evening performances.

Student Organizations

Students have the opportunity of participating in and developing leadership through a number of campus organizations. Some of these are departmental, some are limited to honor students in their fields, many are open to all interested students. Each has a faculty sponsor and some include faculty in their membership.

Alpha Phi Omega—A service fraternity designed to promote leadership, friendship and service to the campus.

Association of Women Students—An organization to make girls dorm life better and let girls actively participate in college functions through their ideas.

Belle Canto Sorority—A professional sorority to bring unity among the music majors and minors, to provide service to music departments, and to increase the appreciation of music on campus and in the community.

Beta Chi Alpha—A cultural society, in the form of a sorority, which attempts to bring beauty, culture, and art to the campus.

Cheerleaders and Drill Team—An organization to promote school spirit at Union College.

Circle-K International—A service fraternity associated with Kiwanis.

Gamma Beta Phi—A national honor society promoting scholarship, leadership, and good citizenship at Union College.

Girls Service Sorority—A service sorority designed to assemble Union College women in the spirit of service.

Home Economics Club—Sponsored by the Department of Home Economics and open to any girl interested in the field of home economics.

Milesians—An organization to discuss mutual concerns in the field of philosophy.

Mu Omega Beta—A fraternity promoting fellowship, unity, and service to the college community.

Oxford Club—A preministerial discussion group concerned with problems that arise in the Christian ministry.

Phi Cwens—An honor sorority for sophomore women.

Pi Upsilon Beta—A fraternity promoting fellowship, unity, and service to college and community.

Playlikers—An organization promoting interest in the theatre.

Stespean—An organization which produces the yearbook.

Student Center Board—A programming board providing social and recreational activities to supplement those planned by other campus agencies.

Student National Education Association—A national preprofessional organization for men and women planning to pursue teaching as a career.

Union College Science Society—An organization to stimulate interest in the natural sciences.

United Methodist Collegiate Action Group—For students interested in Christian fellowship.

General Information

Athletics

Union College is a member of the Kentucky Intercollegiate Athletic Conference and of the National Association of Intercollegiate Athletics. The college promotes athletics for physical development and as a vital part of the program of extracurricular activities. The program emphasizes the protection of the best interests of the student athlete. Union teams are noted for "clean" sport and competitive spirit. Sport for fun and character building is fundamental. In intercollegiate competition the college is represented by varsity teams in basketball, track, swimming, tennis, golf, baseball, and cross country.

Union College sponsors intramural activities in touch football, basketball, free-throwing, horseshoes, badminton, softball, tennis, volleyball, speedball, and field hockey to have a "sports for all" program. The intramural organization is, in general, made up of men's and women's independent teams. The program includes both team and individual sports. No college credit is given for intramurals but everyone is urged to take part.

Publications

Union College Bulletin.—An official quarterly bulletin, one issue of which is the catalog number. This bulletin is sent free on request.

Parents' Quarterly. —A publication to inform parents of activities on campus.

Orange and Black.—A newspaper published by the student body.

Union College Alumnus.—A quarterly bulletin published by the Alumni office.

Stespean.—The yearbook, published annually by the students of the college.

The Library

The Abigail E. Weeks Memorial Library houses a collection of approximately 63,000 volumes. More than 320 periodicals are regularly received, along with indexing services to facilitate their use. It is also a selective depository for U.S. government publications. The stacks are open for use by all students. Regulations governing the use of library materials are available in the library, and freshmen students are given instruction in the use of its facilities. At the Environmental Education Center, there is a special collection of more than 500 volumes of new books on environmental concerns. This collection provides materials for environmental courses on the main campus as well as those at the center. In addition, the college houses a special Lincoln-Civil War collection containing over 500 volumes, a curriculum library in the Department of Education, and a music library with a collection of 3,500 recordings and musical scores.

Health Service

Union College retains a full-time registered nurse, who is on call at all hours, and maintains free infirmary service for brief illnesses. Since the College does not have facilities for taking care of protracted illness, arrangements for hospitalization must be made by the student or his parents. When a physician is needed, the patient may request the college nurse to call one, whose fee is paid by the student. In case of emergency the college reserves the right to employ a physician or to have a student hospitalized without consent of the parents.

During the calendar year, all full-time undergraduate students may secure coverage of an accident and sickness hospitalization plan which is arranged through Mutual of Omaha. All claims under this student insurance plan are placed by the student and the attending physician.

Student Conduct

Each student is expected to conduct himself at all times according to the rules of good society. This obligation includes compliance with Federal, State, and local laws and adherence to college regulations. As members of a free society, students are always free to peacefully and lawfully petition for amendment or modification of the various laws as well as the college regulations. However, the rights of the student body as a whole and the college as an institution of higher education exceed the rights of any individual student or any group of students. Accordingly, not in an attempt to stifle dissent, but rather to perpetuate an environment where the student may peacefully pursue his studies, actions which are disruptive to the normal functions and operations of the college will not be tolerated. Students who are disorderly in conduct, or unmindful of the rights of others, may be asked to withdraw from the college.

Union College, as a United Methodist-related institution, supports the Church's stand against the use of alcoholic beverages.

No student shall possess or use alcoholic beverages when on college property or in college-approved facilities off campus, or when away from the campus representing the college in any way, e.g., a participant in or spectator at a college athletic event or other college function. Any student violating this regulation may be suspended or expelled.

The sale, possession, or use of stimulant, depressant, narcotic, hallucinogenic or other drugs or substances in violation of the Federal, State, or local laws is prohibited. Any student who illegally sells, possesses, or uses such drugs will be subject to criminal prosecution by the appropriate law enforcement agencies and also will be subject to disciplinary actions by the college. It is the announced policy of Union College to cooperate fully with the various law enforcement officials in the enforcement of the drug laws as with all other laws. A student's lawful use and possession of certain drugs pursuant to a valid prescription from a qualified medical practitioner such as a physician, dentist, or optometrist is, of course, permitted. The college Health Services should be consulted with regard to the use of stimulants which are necessarily illegal drugs since protracted use of these substances may be harmful.

Firearms of any kind are forbidden in the residence halls or on the campus. All weapons must be registered and stored by a resident fellow. Students may be expelled for failing to register firearms.

Gambling in any form is strictly forbidden.

Union College expects good housekeeping from all on-campus resident students. Persons who persist in lack of good housekeeping will be asked to withdraw from residence on the campus. The college reserves the right to enter, inspect, and search the rooms of students at any time.

No student shall engage in disorderly conduct when on college property or in college approved facilities off campus, or when away from the campus representing the college in any way, e.g., a participant in or spectator at a college athletic event or other college function. Any student violating this regulation may be suspended or expelled.

Automobiles

At the time of registration for classes, all students who possess automobiles must complete an automobile registration card. Students who wish to park on campus must pay a $2.00 parking fee and affix a Union College permit. Students must meet minimum insurance requirements as set forth by the Commonwealth of Kentucky.

Bulldogs
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Bulldogs
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SPECIAL PROGRAMS

Advanced Placement

Students at Union College who have had superior preparation in certain curricular areas have regularly been placed in advanced course sections. In certain cases credit will be given by an examination administered by the Head of the Department. The college will also grant academic credit to those incoming freshmen who have successfully participated in the Advanced Placement Program of the College Entrance Examination Board. Interested students should consult the publication "Advanced Placement Program" of the College Board Advanced Placement Examinations, Box 592, Princeton, N.J., and their High School Guidance Counselors. Further information on the program may be obtained from the Registrar or the Academic Vice President.

Advanced Placement for Veterans

Academic credit is granted to veterans for advanced placement, in accordance with the American Council on Education. Up to 60 semester hours may be granted, on a combined basis, from College Level Examination Program (CLEP) tests, courses approved by the U.S. Armed Forces Institute, credit from service schools, and correspondence and extension courses. Veterans with over one year of active duty are automatically awarded eight semester hours of elective credit toward graduation.

Project AHEAD

Union College has entered into an agreement with the United States Army to participate in Project AHEAD. Under this project, qualified young men and women may enroll at Union at the same time they enlist in the Army, with the Army paying 75% tuition assistance for college credits earned while on active duty.

A Career Planner will be assigned to offer counseling to the soldier/student and to maintain contact with him while he is serving in the Army. The Career Planner advises the soldier of the educational opportunities available at the installation where he is stationed and advises him concerning those courses that will apply to his curriculum at Union College. Once the soldier returns to full-time college life he is entitled to up to 36 months of educational benefits through the Veterans Administration to complete his education.

Union College accepts up to thirty semester hours of CLEP credits, provides eight semester hours of credit for military service, and awards additional credit for approved military training courses.

For more information on Project AHEAD contact your nearest Army representative or the Coordinator of Career Planning at Union College.

January Interim Term

During the January Interim term, special projects and courses are offered, both on and off campus. Students may select certain work-study arrangements, foreign study projects, regular courses, and independent study projects. The tentative schedule for the January Interim is available in the spring, and final decisions and registration take place about October 1. The January Interim is intended to provide students with unusual and challenging opportunities to broaden and further their education.

College for High School Students

Superior high school students, recommended by their Principals, are permitted to take certain college freshman courses in the summer sessions between their junior and senior years in high school and between their graduation and the opening of the regular fall semester. Credit earned in these courses will be recorded after the student has been regularly admitted to college following his graduation from high school. Selected high school students may also elect some courses during their senior year. Special tuition rates are available to such students.

School Social Worker

The college offers a curriculum to prepare students for positions as School Social Workers. The Kentucky Department of Education has approved the curriculum and graduates receive certification. Further information on this program is available from the social work department.

Extension Program

Extension courses will be offered in communities throughout Southeastern Kentucky and nearby communities in Virginia and Tennessee when requested by the school officials or an interested group of prospective students. The college sends a representative to the community to register and counsel with the students. Courses may be on the undergraduate or graduate level and are offered evenings and Saturday mornings.

Summer Session

Union College has two five-week summer terms; classes normally meet five days a week. Some classes and workshops may be of shorter duration.

The work offered in the summer is the same as that offered in the winter semesters. Students may take summer work to accelerate their program or complete college requirements. The requirements for admission are the same as for the regular year.

Certificate of Advanced Study in Social Work

The program for the Certificate of Advanced Study in Social Work is designed to aid Social Workers in advancing their professional standing and completing the requirements for the M.S.W. degree with the least interruption in their agency responsibilities. The program consists of Social Work courses held in the evening and on Saturdays for social agency staff members.

Many graduate schools of Social Work have instituted a "fifth year" program of study. Admission to these programs requires the applying student to have successfully completed a baccalaureate degree in Social Work or an equivalent course of study. Individual demonstration of competence in beginning level of Social Work practice may also be required through written testing and personal interviews. Students who complete the Certificate Program are eligible to apply for admission to a program where they may obtain a Master of Social Work degree in one year of study rather than completion of a traditional two-year Master of Social Work program.

Applicants to the Certificate of Advanced Study program at Union must possess a baccalaureate degree from a regionally accredited senior institution and must be employed full-time in the delivery or administration of social services. Application should be made to the Director of Admissions, Union College.

Some social agencies in Kentucky provide financial assistance for employees to cover the cost of tuition if courses are completed with a grade of "C" or better. Salary increases may also be available to state employees who complete the certificate program. Workers should contact their supervisors for full details.

The faculty at Union designs programs to meet the particular needs of each student, as determined by previous course work and experience. Additional information is available from the Social Work Department, Union College.

MACCI

Union College is a member of the Mid Appalachia College Council, Inc., a consortium of twelve colleges. This consortium performs many functions, but there are two of special academic significance which provide unusual opportunities for Union College students.

1. Since 1968, a series of special honors seminars has been conducted at the Oak Ridge (Tenn.) Institute of Nuclear Studies for selected MACCI majors in biology, chemistry, and physics. These students, under the direction of the Oak Ridge Institute's professional staff, conduct experiments with specialized equipment in the realm of nuclear studies. Arrangements are planned that will provide summer employment at the Institute as research assistants for qualified students of the twelve Council colleges.
2. MACCI owns and operates a Biological Field Center on Norris Lake near LaFollette, Tennessee. Academic study at the Center is carried out during the summer terms, and correlated with courses in the biology department at Union College. Nearby mountains and many historic places are easily accessible for excursions and picnics. An organized recreational program on the campus, with swimming pool and tennis courts, is available to students.

Washington Semester

Under an agreement with the American University in Washington, D.C., Union College participates in the Washington Semester Program. Students selected to study under this program spend a full semester of their junior or senior year in Washington and are enrolled at the American University. This program affords students an opportunity to continue their college education while observing the operation of government and international agencies in the nation's capital. Detailed information on the program may be obtained from the Head of the Department of History and Political Science. (See the financial aid section for the special Robsion Political Science Scholarship.)

Appalachian Semester

The Appalachian Semester, which is operated twice yearly during the fall and spring terms, is a unique interdisciplinary academic program in which mature second semester sophomore, junior and senior students from Union College and other higher educational institutions throughout the United States devote their full time to studying the Appalachian region—its strengths, problems and challenges. Students earn a total of fifteen semester hours of academic credit. Nine hours of credit are offered in sociology at the upper division level, and six hours are offered at either the lower or upper division level for field work in a variety of disciplines. Field work may be either experiential learning of a regional nature in a local service agency or other institutional setting, or it may be directed study in the region at large. The program is designed to combine interdisciplinary classroom experiences and on-the-scene community experiences into a "living-learning" situation where total involvement of students and faculty may take place.

Opportunities are provided to discuss with local and regional leaders assets and problems of the region, and field trips are coordinated with seminar discussions in order to involve participants on the spot with current regional issues. Following an orientation of approximately four weeks, students travel into the area and learn through active participation in various aspects of regional concerns.

Course descriptions are included in the curriculum section of this catalog. Detailed information and application forms are available from the Director of Regional Studies, Union College.

Career Planning, Academic Advising, and Placement Services

Upon admission to Union College, a student will begin a process whereby career planners and faculty advisors assist students to articulate their career goals, to select academic courses of study appropriate to those goals, and to achieve suitable placement upon completion of their studies. Career Planning Counselors will travel to the homes of new students accepted by the college before their first semester in residence in order to insure that the proper counseling and advisement can be initiated at the outset of the student's tenure at the institution. A student should therefore be insured of a smooth transition from high school to the academic environment of Union College with the appropriate services available throughout the student's tenure and beyond.

College-Level Examination Program (CLEP)

Union College is a regional testing center for the College-Level Examination Program (CLEP). The CLEP tests provide college credit for material students have mastered through self-study or through unaccredited classes. Up to 30 semester hours of credit can be earned at Union College by passing the CLEP examinations; there are five general exams and 33 in specific subject areas. As an Open Testing Center, Union administers exams every Saturday in the third week of each month.

No charge is made for the credit earned in the general battery. A $25 fee is charged for the recording of each advanced subject examination in lieu of tuition.

Environmental Studies Program

Since 1970 Union College has conducted a variety of environmental studies programs for students and regional community leaders. Some of these activities have been based on the main Barbourville campus. Most, however, have been operated from the Union College Environmental Education Center in the Cumberland Gap National Historical Park. This special 100-acre campus, located near the town of Middlesboro and about 35 miles south of Barbourville, includes classroom facilities, dormitories, a dining hall, a gymnasium, conference rooms, a library, and a laboratory. The 20,000 acres of the surrounding national park provide excellent opportunity for environmental field study.

The entire environmental studies program is being revised for incorporation into a more comprehensive Appalachian Regional Studies Program. Components of this developing program include an undergraduate Area of Concentration in Environmental Studies, an Environmental Modeling Project, and the Appalachian Environmental Summer Semester.

Although the new comprehensive, interdisciplinary regional studies program will not be fully operational until the 1976 academic year, an intensive five-week summer program in environmental studies will be offered at the Union College Environmental Education Center in June-July, 1975. This six semester hour program will emphasize field studies and take an interdisciplinary approach to environmental issues of special concern to the Appalachian Region. Inquiries about this special program should be sent to the Chairman, Division of Natural Sciences, Union College, Barbourville, Kentucky 40906.

Experiential Education

Certain types of off-campus work-learning activities are an integral part of various curricula at Union College. These include cooperative education, field work with social and governmental agencies, and independent research. These activities are all exercised under faculty control and supervision during the regular school term and are evaluated in terms of credit toward degree requirements.

These programs are open to Union College students with sophomore or higher rank who are not on probation.

Arrangements for off-campus work-learning experiences must be initiated by the student with the Office of Experiential Education.

Union College's Experiential Education program is approved for the training of veterans and other eligible persons under the provision of Title 38, chapters 34, 35, and 36, U.S. Code.

Special Education

Programs leading to certification in Special Education in the areas of Neurological Impairment and of Mental Retardation will be available in September, 1975.

ADMISSION TO THE COLLEGE

APPLICATION FOR ADMISSION—Undergraduate

Each applicant for admission to Union College must present to the Committee on Admissions satisfactory evidence of his previous academic training and good character. He should:

1. Write to the Director of Admissions, Union College, Barbourville, Kentucky 40906, for an Application for Admission form.
2. Return the application to the Director of Admissions. No admission fee is required. Upon receiving the application for admission, the admissions office will mail the applicant a Health form and two reference forms which should be completed and returned at the earliest possible convenience.
3. Have an official transcript of all high school and previous college work mailed directly from these schools to the Office of Admissions. Only those transcripts mailed directly from the school previously attended are considered official. General Equivalency Diploma certificates will be accepted, at the discretion of the college, in lieu of a high school diploma.

Upon receipt of the application for admission, the Office of Student Affairs will mail a student information sheet/housing application. This form should be completed and returned promptly. Students not planning to live on campus should disregard the application for housing and complete only the student information portion. A refundable $40.00 room deposit should accompany the application for housing.

The child of a disabled or deceased veteran, under Public Law 864, should file an application for program of Education and Training with the Veteran's Administration which will issue a Certificate of Eligibility to attend Union College.

The Committee on Admissions will act immediately upon the receipt of all credentials and deposits. Each applicant will be notified in writing promptly thereafter.

Admission to the Freshman Class—Each applicant should submit a transcript which shows that he has graduated with sixteen units from an accredited high school with at least a "C" average, ranks in the upper two-thirds of his graduating class, and has acceptable scores on SAT or ACT tests. Ten of the units earned must be in academic subjects: three units in English, two units in mathematics, two in social studies, and two in science. Foreign language is recommended. Students failing to meet these standards may be admitted if the Committee on Admissions thinks other factors warrant special consideration. The student who fails to meet these standards, but who is admitted because factors warrant special consideration, may be admitted on probation.

An applicant who has graduated from a non-accredited high school must establish his ability to pursue a college program before he can be recognized as a candidate for a degree. This may be done by completing at least twenty-four semester hours of residence study with not less than a "C" average.

An applicant, not less than 21 years of age, may be admitted on a high school equivalency certificate, based on the General Education Development tests, provided the scores earned are equal to or above the minimum recommended for college entrance by the American Council on Education.

There is open admission for all veterans and all persons twenty-one years of age and over, who have not attended another institution of higher education but who have been graduated from an accredited high school.

Freshman Orientation and Registration—Each member of the freshman class must be present at the time scheduled for Freshman Orientation. A program concerning problems peculiar to beginning students will be conducted by the faculty and a group of advanced students. The faculty of the college will be present to aid students in registering and to offer advice in choosing courses.

Admission to Advanced Standing and Transfer Students—Applicants who desire admission with advanced standing must present credits from an accredited community college, junior college, senior college, or university. The transcript of credit must show that the applicant has been honorably dismissed, that the entrance requirements of Union College have been met, and that he has a "C" average. Students failing to attain a "C" average may be considered for admission on probation providing there is evidence that he can attain a 2.0 cumulative grade point average in a reasonable length of time. All credits earned from an accredited community college, junior college, senior college, or university can be transferred to Union College. Sixty-seven semester hours is the maximum amount of junior college or community college credit which may be counted toward a degree.

Information concerning Advanced Placement, CLEP, High School Special Program, and Veterans credit is found in the Special Programs section of the catalog.

War Orphans Education—Application should be made at the nearest Veterans Administration Office, prior to registration for college.

Admission to the Graduate Program—The applicant must file an application for admission with the Dean of the Graduate School, Union College, Barbourville. Two official transcripts of all college work are required and must be mailed directly from the school previously attended. There is a $15.00 admission fee, which is refunded only when admission is denied.

Admission as Auditors—Students may audit some classes, with the permission of the instructor. They must register as if for credit. There is an audit fee.

Admission of Foreign Students—Foreign students must complete the regular admissions process. In addition, a $200.00 admission deposit must accompany the application. After a foreign student is accepted he must request an I-20 form from the Office of Admissions. Once the student enrolls, the $200.00 admission deposit will be applied toward his tuition.

In order to be considered for admission, a foreign student must score at the 107 level or higher on the ELS English Proficiency and Achievement report and/or score 500 or higher on the Test of English as a Foreign Language (TOEFL).

When the admission process is completed, a foreign student is obligated to stay at Union for at least one year. No official transcript or recommendation will be released until the student fulfills the year's obligation. If a student leaves before one year, he must be reported to the Immigration and Naturalization Service. One year is interpreted as two full semesters, excluding summer sessions.

The student must pursue a full course of study. Those who drop to part-time status must by law be reported to the Immigration and Naturalization Service. No visas and/or passports will be renewed until the student's account is paid in full.

Physical Examination—Union College attempts to give aid to all students in matters of health. A thorough examination by a regular physician is required as a part of the entrance procedure of each student.

Physical Examination report forms may be obtained from the Office of Admissions or from the college nurse, and the examination should be made by the applicant's family physician. If a completely filled out medical examination report is not filed at registration, the student is required to have the examination made by a local physician, at his own expense, before registration is completed.

Room and Board—If a campus dormitory room is desired, application must be made with a reservation deposit of $40.00. No room reserved for a student will be held unoccupied beyond the day of registration unless there is a definite explanation and a request to occupy at a stated later date.

The $40 room deposit is refundable up to one year after the last date the student is enrolled at Union College. Should a student pay room deposit, and decide not to enroll at Union College, he will be eligible for a refund up to one year from the date his deposit was received. After the refund period expires, the student forfeits his deposit to the college. A student must submit a written request to the Office of Student Affairs for the refund. Refund of room deposit is conditional upon the depositor leaving the dormitory rooms and equipment undamaged. All readmission students are assigned housing according to their new date of admittance. The readmission acceptance date becomes their room deposit date.

Room keys that are not turned in to the Office of Student Affairs at the end of the term or school year will be charged to breakage at the rate of $1.00 a key. The same rate will be charged to any student for whom it is necessary to replace keys.

Linen and towels will be provided each student living in the college dormitories. The college does not provide blankets, rugs, or curtains. Students should bring study lamps or may purchase them through the college bookstore. Light bulbs for these should not be in excess of 75 watts.

All students who room on the campus are required to board in the college dining hall unless they have permission to do otherwise, from the Dean of Students.

Off Campus—All students 21 years or older, juniors and seniors (according to the Registrar's Office), veterans, and married students, can live off campus if they so desire. Juniors and seniors under 21 must have parental permission.

Liability—Union College will not be responsible for loss of personal property or bodily injury resulting from fire or other causes.

COLLEGE EXPENSES . . . FINANCIAL AID

The academic year of nine months is divided into two semesters and a January Interim term. The rates quoted below are for one semester. The cost of a regular session of nine months can be found by multiplying a semester's expenses by two. All checks should be made payable to Union College.

Undergraduate Expenses:

Tuition (10 to 17 semester hours)*	$ 815.00
Room	145.00
Private Room	210.00
Board (19-meal week)	288.00
Total for Boarding Student*	1248.00
Total for Non-Boarding Student**	815.00
Part-time tuition for all registration under ten or above seventeen semester hours, per semester hour	30.00

Graduate Expenses:

Graduate Tuition, per semester hour	37.50
Activity ID card (required for boarding graduate students)	10.00

Summer Session Expenses:

Tuition, Undergraduate, per semester hour	30.00
Graduate, per semester hour	37.50
Room, each 5-week term	40.00
Private Room, each 5-week term	60.00
Board—full week, each 5-week term (21-meal week)	100.00
—short week (Monday breakfast through Friday lunch) each term (14-meal week)	85.00

January Term:

Board	40.00

The January Term may be considered as part of the fall semester for tuition purposes at the student's option—i.e., the student may restrict his fall load to a maximum of 14 hours and pay no tuition for the January Term. This option is available only to full-time students.

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*Vacation periods are not included in the quotation. Dormitories are closed during intermissions and Christmas holidays. The college reserves the right to entertain delegates to conventions and other related groups in the residence halls during vacation periods. Students will be notified in advance of such contemplated occasions and assurance given regarding the safe-guarding of their personal property during such occupancy. Due to uncertainties in the price of food the College charges for Board may, if necessary, be changed at any time without notice.
**$10.00 of this amount each semester, is designated for Student Center construction, as voted by students December 10, 1962. $1.00 is collected for Student Senate dues, $1.00 for class dues, and $1.50 for the I.D. card.

The charges for individual meals in the Dining Hall are as follows: Breakfast, $1.00; Lunch, $1.20; Dinner, $1.35; Sunday noon, $1.50.

Other Expenses

Audit fee, per semester hour	$ 10.00
Change in schedule fee	2.00
CLEP—Advanced Tests only (per test)	25.00
College Court Rental, per month (all utilities furnished)	65.00
Examination: late examination fee	1.00
late final examination fee	5.00
credit by examination, (per course)	25.00
Foreign Student-Admission Deposit	200.00
Graduate Activity Fee (required for boarding graduate students)	10.00
Graduate Admission Fee	15.00
Graduation fee for Bachelor's degree	25.00
Graduation fee for Master's degree	30.00
Graduation in absentia fee	10.00
Music: Preparatory Department: Piano, Strings, Wind Instruments	
one half-hour lesson, weekly, per semester	50.00
one-hour lesson, weekly, per semester	75.00
Music lessons: part-time and special students, per semester	30.00
Transcipt—after first copy (one week's notice required)	1.00

Terms of Payment

Full semester's charges, room, board, tuition, and fees, must be paid no later than registration date. Should the student have an approved loan, scholarship, workship, workstudy grant, or other form of financial assistance, such amount will be deducted from the total charges with the then net amount payable at the time of registration. The Office of Business Affairs can make no exception to this regulation. The college also reserves the right to hold a student's transcript or other academic records until all financial obligations to the school have been satisfied.

Refund Information

Since faculty contracts and other commitments are made by the college for the entire year in advance, the following refund schedule has been established in order that the college and the student may share the loss equitably when it is necessary for a student to withdraw or to make a change in his program.

1. There will be no refund given for room rent unless the decision to withdraw is made by day of registration. This rule applies to all withdrawals including students dismissed from college.
2. Board will be refunded in full amount unused to the date of withdrawal. A full week is charged for any fraction of a week.
3. Tuition will be refunded on the following basis:
   REGULAR TERM—Twenty percent of the total for tuition will be charged for each of the first five weeks. No refunds will be made on tuition after the fifth week. Any part of a week will be treated as a full week. Refund is based on tutiton charges, less $10 student center allocation, $1 class dues, and $1 student senate fee.

SUMMER TERM—Fifty percent of total tuition will be charged the first week and fifty percent the second week. No refunds following the second week. Any part of a week will be treated as a full week.

4. Any registrant who has completed registration and who has failed to attend a single class may have his account credited for the money paid, this to apply for use on future registration within a twelve-month period.
5. **Room Reservation Deposits**—This deposit will be refunded if request is made in writing not later than August 1 for the Fall Semester or thirty days before the opening of any other semester for which the contract is first effective. Students, once enrolled, must submit a written request with the Office of Student Affairs at least 30 days before the end of the term for cancellation of the contract. This deposit will be refunded upon receipt of written authorization by the Dean of Students or Dean of Women indicating the depositor is no longer enrolled as a student at Union College and that he has left dormitory rooms and equipment undamaged.
6. No fees are returnable.

   A student is considered to be enrolled until he formally notifies the Office of the Registrar of his withdrawal and all refunds will be based on the date of notification.

Financial Assistance

Standards for Receiving Financial Aid

Union College maintains an extensive program providing opportunities for financial assistance to promising students who need help in meeting their expenses, or who have attained particular merit in scholarship or other accomplishments. Only those students whose scholarship and character indicate leadership ability and promise of future usefulness will be approved for aid.

Students receiving financial assistance may be deprived of their aid at any time if they are negligent in the performance of their duties, careless in their conduct, or unwilling to cooperate fully with the policy of the college.

As a general policy no student will be eligible for more than one scholarship, nor will any student be eligible for aid from a combination of scholarship, workship, and loan-grant sources in excess of the full amount of his tuition, room, and board. Scholarships and/or grants in aid will not be applied to student accounts until the close of the current semester for which the student is enrolled. Therefore, should a student who is the recipient of a scholarship withdraw prior to the close of the semester, he forfeits the right to all scholarship benefits.

Union College participates in the College Scholarship Service (CSS) of the College Entrance Examination Board. Participants in CSS subscribe to the principle that the amount of financial aid granted a student should be based upon financial need. The CSS assists colleges and universities and other agencies in determining the student's need for financial assistance. Entering students seeking financial assistance are required to submit a copy of the Parents' Confidential Statement (PCS) form to the College Scholarship Service, designating Union College of Kentucky, College Code 1825, as one of the recipients by May 15. The PCS form may be obtained from a secondary school or the College Scholarship Service, P.O. Box 176, Princeton, New Jersey 08540; P.O. Box 1501, Berkeley, California 94704; or P.O. Box 881, Evanston, Illinois 60204.

Applying for Financial Aid

Inquiries regarding scholarships, loans, and financial aid should be addressed to the Office of Financial Aid, Union College, Barbourville, Kentucky 40906.

The only aid for which a foreign student may be eligible is scholarship aid. A foreign student must have completed four consecutive regular semesters at Union College to qualify for scholarship aid and must be approved by the Student Aid, Grants and Scholarship Committee.

1. No student may be approved for financial aid until official admission to Union College has been granted.
2. An application for financial aid must be submitted to the Office of Financial Aid. This form may be obtained by writing the Director of Admissions. This form must be completed and submitted by April 15 preceding the fall term.
3. Parents or guardians of applicants must complete the Parents' Confidential Statement of the College Scholarship Service, Box 176, Princeton, New Jersey 08540, and return it, following the printed instructions on the form, to Princeton, Evanston, or Berkeley, depending on their place of residence. Blank forms are available in most high school guidance offices or from the College Scholarship Service.
4. Students applying for a scholarship or other financial aid shall submit a transcript to the Office of Student Affairs, as well as to the Registrar.

Scholarships

President's Scholarships—Honor Scholarships in an amount up to $700.00 for the academic year are available to select graduates of accredited high schools enrolling in college for the first time. To qualify, students must rank in the top 3% of their graduating class. Evidence of high school rank must accompany the application for financial aid certified by the high school attended. All test scores should also accompany the application for financial assistance.

Honor Scholarship renewals will be based upon a scale of cumulative grade point average as follows:

Cumulative Grade Point Average	Amount of Award
3.0 . . . 3.49	$500.00
3.5 . . . 4.00	$700.00

Alumni Scholarships.—The Alumni Association of Union College awards two scholarships annually on the basis of character, need, and evidence of future usefulness. Each scholarship is for $400. Recipients are selected by the Alumni Scholarship Committee

Appalachian Regional Scholarship.—Two friends of Union College have established the Appalachian Regional Scholarship to be awarded to an Appalachian student on the basis of financial need and promise of future usefulness to the region. The stipend is $150 per semester.

Bank of Harlan Scholarships.—A number of scholarships are given annually to qualified students from Harlan County by the Bank of Harlan. The stipends are determined according to financial need and academic excellence.

Barbourville Kiwanis Scholarship.—The Kiwanis Club of Barbourville, Kentucky, has supplemented an educational fund originated by Mr. C. F. Heidrick and established a scholarship fund at Union College for promising students from Knox County, Kentucky.

Barbourville United Methodist Church Music Scholarships.—Annually The First United Methodist Church of Barbourville, Kentucky, awards four scholarships to music students amounting to $200 for a total of $800. Consideration is given for participation in the music program of the local church.

Henry C. Black Memorial Scholarship. This scholarship is given as a memorial to Mr. Henry C. Black, a graduate of Union College, to a freshman student graduating from a high school in Kentucky or Tennessee. The scholarship stipend is $250 and is awarded on the basis of need, scholarship, character, and promise of future usefulness.

John A. and Hannah P. Black Memorial Scholarships for Christian Workers. —The late Dr. and Mrs. Henry C. Black of Johnson City, Tennessee, endowed a scholarship that provides an annual stipend of $500 for a promising student who plans a life of service in The United Methodist Church.

Dr. and Mrs. James F. Blair Scholarship.—Dr. and Mrs. James F. Blair of Barbourville, Kentucky, have endowed a $250 scholarship for students from Knox County, Kentucky. It is awarded annually to a student in the sophomore, junior or senior year on the basis of need, scholarship, character, and promise of future usefulness.

Kathy Brick Memorial Scholarship.—Mr. and Mrs. Theodore F. Brick of Dayton, Ohio, provide annually a scholarship of $100 for a student who participates in the competitive swimming program of the College.

The Eulalia Serrano Cabrero Memorial Scholarship.—Miss Carmen Cabrero '64, Jacksonville, Florida, has established a scholarship in memory of Eulalia Serrano Cabrero, a 1964 graduate of Union College. The scholarship will pay $100 per year, and is made available to a needy student of minority background interested in social work, preferably a Methodist.

W. S. and Bess Carpenter Scholarship.—Mr. and Mrs. W.S. Carpenter of London, Kentucky, provide annually a scholarship for a worthy freshman, preferably from Southeastern Kentucky. The stipend varies with need, but is in the $500-$700 range.

E. Nettie Edinger Memorial Scholarship.—The late Mr. Joseph Edinger endowed this scholarship in memory of his sister. The scholarship is awarded annually to a deserving and worthy student enrolled at Union College.

Alfred I. DuPont Scholarship Fund.—The late Mrs. Alfred I. DuPont of Wilmington, Delaware, established a scholarship endowment, the income from which is used annually to provide one or more scholarships to needy students having high academic potential. Preference in the awarding of these scholarships is given to students from the Appalachian counties of Kentucky and surrounding mid-Appalachian region in adjoining states.

Dr. J. Edward Faulkner Memorial Scholarship.—Mrs. J. Edward Faulkner of Barbourville, Kentucky, provides an annual scholarship in memory of her late husband. The scholarship is awarded to a junior or senior who plans a life of service in the healing arts, with preference being given to a predental student.

Ernest Goodwin Green Memorial Scholarship.—Mrs. Ernest Green, Grand Rapids, Michigan, has established a memorial scholarship to be awarded annually to a drama major considered to be the most capable of contributing toward the success of the department. The scholarship is given in memory of her late husband.

John O. and Harriet B. Gross Memorial Scholarship.—Family and friends of Dr. and Mrs. John Owen Gross have endowed a scholarship in their memory. Dr. Gross was president of Union College during the years 1929-1938. The scholarship is awarded annually to a senior on the basis of scholarship and leadership, with preference being given to students from Northern Kentucky. The stipend and requirements are the same as for "United Methodist Scholarships."

Hubbuch in Kentucky Scholarship.—Hubbuch in Kentucky provides an annual scholarship of $400 for a student from Louisville or Jefferson County, Kentucky, who otherwise would be financially unable to attend college. It is awarded annually to a freshman on the basis of financial need, scholarship, character, and promise of future usefulness, with special emphasis on students who plan to enter private business activities in Louisville or Jefferson County.

Irene Hughes Scholarship.—Miss Irene Hughes (AB '37; MA '63), Barbourville, Kentucky, provides an annual scholarship of $200 for a freshman girl, a graduate of Knox Central High School, who has been a member of the High School Honors English Class and who exemplifies Christian principles of conduct. The scholarship will be awarded by the Alumni Scholarship Committee.

Rural Electric Scholarship.—The Inter-County Rural Electric Cooperative of Danville, Ky., has established a $100 annual scholarship to assist a Union College student whose parents are members of Inter-County RECC in the counties they serve. This scholarship is awarded on the basis of financial need, character, and academic promise. Preference will be given to freshmen.

Professor and Mrs. Millard L. Jordan Scholarship.—Professor and Mrs. Millard L. Jordan of Lakewood, Ohio, have established a scholarship fund at Union College to aid worthy Appalachian students. The income from the fund will be awarded as a scholarship to a student each year on the basis of need, scholarship, character, and promise of future usefulness.

Junior College Scholarship.—A number of $500 scholarships are available to graduates of junior or community colleges who have earned the A.A. or A.S. degrees with a GPA of at least 2.5 on a 4 point scale. They are renewable for the senior year if the student maintains at least a 2.5 average at Union College.

Junior Study Club Scholarship.—The Junior Study Club of Barbourville, Kentucky, provides a $200 scholarship at Union College to aid worthy students from Knox County, Kentucky. The scholarship is awarded to a girl who graduated from a high school in Knox County who is a Junior or Senior at Union College. The scholarship recipients are chosen on the basis of need, scholarship, character, and promise of future usefulness.

Jeffrey W. Kronk Memorial Scholarship.—Mr. and Mrs. Walter F. Kronk of Huntsburg, Ohio, have endowed a scholarship for a needy, qualified student from Geauga, Lake, or Ashtabula counties in Ohio, or from the Appalachian counties of Southeastern Kentucky. The scholarship is in memory of their son, Jeffrey, who was enrolled at Union College from 1963 through 1967. Should there be no qualified students enrolled from these areas in any given year, the endowment income will be used to support the Lincoln-Civil War Collection at Union College.

W. B. Landrum Memorial Scholarship.—Mr. John W. Landrum of Harrodsburg, Kentucky, provides annually a scholarship of $350 for a promising United Methodist ministerial student in memory of his father. The student benefited by this scholarship must exhibit outstanding personal attitudes of religious sincerity, devotion, and earnestness in purpose. Demonstrated failure to exhibit these qualifications to a high degree will result in the forfeiture of the scholarship.

London Laundry Scholarship.—The London Laundry & Dry Cleaners, London, Kentucky, has established an annual $250 scholarship to assist a student graduating from a high school in Southeastern Kentucky during his freshman year at Union College. The scholarship is awarded on the basis of scholarship, character, and promise of future usefulness.

National United Methodist Scholarships.—The Board of Education of the United Methodist Church makes available annually to several United Methodist students scholarships covering tuition and fees. The awards are made on the basis of character, need, and scholastic ability. Only students having at least a "B" average are eligible.

Presser Foundation Music Scholarship.—Union College receives each year from the Presser Foundation, Philadelphia, Pennsylvania, a grant of $400 to be given by the College as a Music scholarship. Recipients of this scholarship are selected by the President of the College and the Head of the Music Department. The recipient must be majoring in music, and preference will be given to students preparing to become teachers of music.

E. O. Robinson Mountain Fund Scholarship.—The E. O. Robinson Mountain Fund has established an annual scholarship program to assist needy students who reside in the Appalachian Region of Eastern Kentucky. Students receiving these scholarships should give promise of being able to complete their academic work successfully. They should be and remain unmarried while receiving assistance from this scholarship. Qualified persons should apply to the Office of Financial Aid.

Robsion Political Science Scholarship.—Honoring Senator John M. Robsion, Sr., and Congressman John M. Robsion, Jr., the Robsion Political Science Scholarship provides a stipend of $750 for the Union College student participating in the Washington Semester Program each year.

Sanders Honor Scholarships.—Colonel Harland Sanders of Louisville, Ky., provides annually a number of honor scholarships with the same stipend and on the same terms as the President's honor scholarships. The Sanders Honor Scholarships are limited to students who do not use tobacco and alcoholic beverages.

Sims Scholarship Fund.—Reverend and Mrs. Harry C. Sims of West View, Kentucky, have established a scholarship fund at Union College to aid worthy students preparing for the United Methodist ministry. The income from the fund will be awarded as a scholarship to a student each year on the basis of need, scholarship, character, and promise of future usefulness.

Cawood Smith Harlan County Scholarship.—Mr. Cawood Smith, Harlan County attorney, has established a $5,000 endowment for a scholarship to be awarded to the son or daughter of a miner from Harlan County, Kentucky. The recipient shall be a resident of Harlan County and selected upon the basis of need, scholarship, and promise of future usefulness to the coal region. The stipend shall be $250.

Hulbert Taft, Jr., Memorial Scholarship.—Mrs. Thomas C. Haydock, Sr., of Cincinnati, Ohio, has provided a scholarship endowment as a memorial to her late husband, Hulbert Taft, Jr. The income from the endowment will be used annually to provide one or more honor scholarships to needy students having high academic potential.

Edward Townsend Memorial Scholarship.—Mr. Milton H. Townsend, Vice President for College Relations and Development at Union College, has endowed a scholarship for a worthy student with preference being given to a history and political science major. The stipend has been established in memory of Mr. Townsend's late father.

Union National Bank Scholarship.—The Union National Bank of Barbourville, Kentucky, has established a half-tuition scholarship of $815 at Union College to aid worthy students from Knox County, Kentucky. It is awarded to a student graduating from a high school in Knox County, for the freshman year at Union College, on the basis of need, scholarship, character, and promise of future usefulness.

Harry C. Viall Memorial Scholarship.—Mrs. Harry C. Viall of Barbourville, Kentucky, has endowed a memorial scholarship for a needy, qualified student with preference going to an individual from Knox County. The annual scholarship is given in memory of her late husband, Harry, who was a prominent local businessman.

O. H. Viall Memorial Scholarships.—The late Mrs. O. H. Viall and family of Barbourville, Kentucky, have established a memorial scholarship fund at Union College to aid worthy students. The number and size of the scholarships vary being intended for emergency use by needy students.

William M. Wilson Memorial Scholarship—Mrs. Eva Oldfield Wilson of Barbourville, Kentucky, has established a scholarship fund in memory of her late husband. The income from the fund will be used to provide an annual stipend of $250 for a promising student preparing to teach in the elementary or secondary schools.

Dr. Henry M. Zimmerman Scholarship.—Dr. Henry M. Zimmerman of Pompano Beach, Florida, has established a scholarship endowment, the income from which is used annually to provide a scholarship for needy students of exemplary character who show promise of being able to contribute to the well-being of their country and their fellowman.

Other Scholarships—Other scholarships are often available for students of exceptional academic ability and/or great financial need. Inquiries should be addressed to the Office of Financial Aid.

Assistantships

Several Senior Assistantships are made available annually in the academic divisions. The assistantships are open to students of outstanding scholastic ability who exhibit great promise of future usefulness and who are considering graduate studies with a view of entering college teaching. The duties of the Senior Assistants include occasional classroom lectures, research, remedial work with beginning students, assisting in laboratories, etc. The Assistants are expected to spend a minimum of twelve hours per week on the work assigned. The awards are made by the Scholarship Committee upon recommendation from the Division Chairmen. Senior Assistants receive a stipend of $600 per year.

Resident Grants

A Resident Grant program provides a student's room for an academic year. Grants are given on a basis of academic achievement, participation in campus activities, and need. A separate application must be filed, and these may be obtained from the Office of Financial Aid.

Workships

The college seeks to employ as many students as possible in jobs on the campus. Such jobs consist of stenographic work in college offices, science laboratory assistance, service in the dining room and kitchen, in the library, student center, gymnasium, and on the campus grounds. Each workship student is under the supervision of a faculty member or other college employee who makes a monthly time report to the Office of Student Affairs where credit on an hourly basis is entered on the student's account. Students are paid the minimum wage. The Office of Financial Aid can withdraw the workship at any time if student performance or attitude is unsatisfactory.

Work-Study Program

Undergraduate students who need financial assistance to attend college may apply for employment under the College Work-Study Program at Union College. Preference is given to students who have the greatest need after the application of all public and private grants. Students who work part-time while attending school and full-time during vacation periods may earn a large portion of the amount needed for college expenses. The federal minimum wage is paid to all enrollees.

Graduate students who have need and qualify may be considered for the College Work-Study Program. Those assigned will receive more than the federal minimum wage.

Supplemental Educational Opportunity Grants

The Educational Opportunity Grant Program provides grants of from $200 to $1,000 to students of exceptional financial need who are in academic good standing at Union College. This program, financed by the government, is an "opportunity" program and not a "scholarship" program, and

therefore students are eligible if allowed to remain in the institution, if academic promise continues, if it is reasonable to expect graduation, if federal funds continue to be available, and if financial need remains. Those interested may receive applications and further information through the Office of Financial Aid.

Basic Educational Opportunity Grants

The Basic Educational Opportunity Grant Program provides grants to students who will be freshmen and sophomores in the academic year of 1975-76. The federal government decides the amount of the stipend. Students who attend Union College usually qualify for approximately $700. Applications are available in the Office of Financial Aid or at your local Post Office.

State Student Incentive Grant

The grant program provides grants to students who are residents of the Commonwealth of Kentucky and who will be freshmen, sophomores, or juniors in 1975-76. Students must be able to show financial need for this assistance as determined by evaluation of his/her application for a Basic Educational Opportunity Grant.

Loan-Grants

Ministerial Loan-Grant.—Ministerial loan-grants amounting to $400 for the academic year are available to students studying for the ministry. To be eligible for this aid the student must have a license to preach, or enroll in the non-credit religion course, Conference Studies, which is designed to prepare candidates for the obtaining of the license to preach. Renewal of the loan-grant depends on the student's successfully passing this course and obtaining the license to preach before the beginning of the next academic year. Applicants qualified for the loan-grant must sign a note for the amount received each semester. These notes will be cancelled after the individual has entered into the full-time ministry. If the student changes his plans and enters another field of endeavor the notes become due and payable.

Loan-grants amounting to $700 for the academic year are available to United Methodist Local Preachers who agree to serve four years in the Kentucky or Louisville Annual Conference. These notes will be cancelled after the specified service has been fulfilled.

Aid to Children of Ministers.—Special consideration for various kinds of financial aid is given to unmarried dependent children of United Methodist Ministers. The total amount of assistance will be based on financial need. Applications should be submitted to the Office of Financial Aid and additional information may be secured from this office.

College Employee Grants.—The spouse and unmarried dependent children of full-time employees of Union College may receive a full tuition grant at Union College. A tuition grant at other colleges participating in the Tuition Exchange Program is available to employees' unmarried dependent children.

Kentucky United Methodist Church Grants-in-Aid.—Any $200 per year grant-in-aid provided by a United Methodist church in either the Kentucky or Louisville Annual Conferences to a member of that church who is enrolled at Union College as a full-time student will be matched by a $200 per year grant-in-aid provided by Union College.

Loans

George L. Bagby Loan Fund.—Mr. Bagby has provided the money to establish this loan fund for students who are Kentucky residents. Applications should be made to the Office of Financial Aid.

United Methodist Student Loan Fund.—The Board of Education of The United Methodist Church makes available to worthy students at Union College the resources of The United Methodist Student Loan Fund. Apply to the Office of Financial Aid at Union College.

National Direct Student Fund.—Union College is participating fully in the student loan-program as established by the 85th Congress in the National Defense Education Act of 1958. Only students with above average records and real financial need should apply for these loans. Special consideration in the selection of loan recipients will be given to students with superior academic background who express a desire to teach in elementary or secondary schools, and to those whose academic background indicates a superior capacity or preparation in science, mathematics, or a modern foreign language. Detailed information may be obtained by writing to the Office of Financial Aid, Union College.

Elizabeth L. Gates Loan Fund.—Mrs. Waldo Brown of Knoxville, Tennessee, has established a loan fund in memory of the mother of Mr. John B. Gates, a former student at Union College. The resources of the fund are available to senior male students preparing for the ministry.

Dr. Eugene T. Gray Loan Fund.—Dr. Eugene T. Gray, of St. Petersburg, Florida, has established this fund to aid worthy and needy students.

Burton and Verda Hensley Student Loan Fund.—Mr. and Mrs. Burton F. Hensley have established a loan fund to aid students at Union College. The resources of the fund are available to worthy and needy students.

Rev. and Mrs. Erwin King Loan Fund.—Rev. and Mrs. Erwin King have established a loan fund to aid worthy ministerial students in the junior or senior years at Union College. To qualify for a loan, the students must possess high qualities of character and scholarship.

Guy H. Williams Loan Fund.—Dr. Guy H. Williams of Cleveland, Ohio, has established a loan fund in memory of his wife, Anna Williams. The resources of the fund are available to worthy students who have spent two years at Union College and have a "C" average or better.

Book Loan Fund.—The Senior Class of 1957 established a loan fund with the hope that future classes would add to its capitalization. The resources of the fund are available to full-time students on a short-term loan basis for the purchase of required textbooks.

Knox County Chamber of Commerce Student Loan Fund.—Mr. William S. Murphy, former director of development at Union College and first vice president of the Knox County Chamber of Commerce, provided the initial gift to establish this fund. The continued support of the fund was accepted by the Knox County Chamber of Commerce as an expression of appreciation for the contribution of Union College to the educational, economic, social, and religious life of Knox County and vicinity. The Knox County Chamber of Commerce attempts to make annual contributions to this fund, and encourages local citizens to do likewise.

The Charles Henry and Glennora Rominger Krieger Student Loan Fund.—This loan fund, established by the late Glennora R. Krieger of Ft. Thomas, Kentucky, provides loans to worthy and needy students at Union College from the designated Appalachian counties of Eastern Kentucky. The terms of the loans are the same as those of The United Methodist Student Loan Fund.

Pickett and Hatcher Educational Fund.—Loans in an amount up to $1,200 per academic year are available to students for the payment of tuition, room, and board. The maximum amount available is $4,800 for undergraduate study. Applicants must apply directly to the agency. Further particulars are available from the Office of Financial Aid.

Other Loan Funds.—Student loans are available from a number of funds not specifically designated for Union College students, but for which Union College students are eligible. Specific information may be obtained from the Office of Financial Aid.

Endowments

The George L. Bagby Scholarship/Loan Fund.—The late Mr. George L. Bagby of Woodford County, Kentucky, established a student financial aid endowment totaling $405,000 including accumulated interest, and this supports both scholarships and loans for Kentucky students.

The Russell M. Bennett Memorial Professor of Sociology Chair.—This chair was given to Union College by Mrs. Helen Hunt Bennett in the amount of $75,000 for the endowment of this professorship in 1946. An additional $2,000 was given for the equipment of the Business Department.

Dr. Robert E. Drew Endowment Fund.—The Commission of Missions of the Hyde Park Community United Methodist Church, Cincinnati, has established an endowment fund in honor of the Rev. Dr. Robert E. Drew, former associate pastor of the church and an honorary alumnus of Union College. The income from this fund will be used for scholarship grants to foreign students.

Dr. Franklin Duncombe Memorial Fund.—Mrs. Helen Duncombe of Haverford, Pa., has established an endowment fund in memory of her late husband, an honorary alumnus of Union College. Income from this fund will be used to finance grants-in-aid under the college loan-grant program for students planning to enter the United Methodist ministry.

Andrew and Emma Elizabeth Edinger Memorial Fund.—This fund was established by the late Mr. Joseph Edinger in memory of his mother and father. The fund has been increased by other members of the family and the income designated for use in the maintenance of campus buildings.

Anna E. and John William Harris Memorial Fund.—Dr. J. William Harris has established a lectureship fund containing the sum of $30,000 in memory of his sister, Anna E. Harris, and his father, John William Harris.

Charles and Leona Jennings Memorial Funds.—Dr. Charles M. Jennings of Marietta, Georgia, has established an endowment fund in memory of his parents, Charles and Leona Jennings, the income from which is to be used to provide an annual bonus to the head of the Department of Biology at Union College.

William Jones Endowment Fund.—Mr. William Jones of Barbourville, Kentucky, has established a fund, which may be augmented from time to time, the income from which is designated for use by the School of Music to purchase recordings and musical scores.

Jeffrey Kronk Memorial Endowment.—This endowment, established by the Senior Class of 1967, in memory of Jeffrey Kronk, a member of that class, will assist in purchasing books for Union College's Lincoln-Civil War Collection.

Francis Landrum Memorial Professor of Religion and Philosophy.—Mrs. Obed H Wilson has established the Francis Landrum memorial professorship through a bequest of $50,000 in 1927.

Dorothy Lucas Memorial Fund.—An endowment fund has been established in memory of Miss Dorothy Lucas, registrar of Union College for many years and beloved friend of students. The income from the fund is used to support various student-aid activities of the college.

Melanie Jean Martin Trust Fund.—Dr. and Mrs. O. J. Wilson of Bowling Green, Kentucky, have established a memorial fund in memory of their granddaughter. The income from the fund is used to purchase library books to support the work of the English Department.

John and Minnie B. McGaffee Trust Fund.—Dr. and Mrs. O. J. Wilson of Bowling Green, Kentucky, have established the John and Minnie B. McGaffee Trust Fund for the purpose of providing financial assistance to worthy and needy preministerial students. The income may be used for grants or loans, with preference being given to students from the Appalachian Region of Kentucky.

Pearl Sinnett Meyer Memorial Fund.—The Rev. Dr. Jesse I. Meyer of Pikeville, Kentucky, has established an endowment fund in memory of his wife, Mrs. Pearl Sinnett Meyer. The income from this fund is designated for the purchase of books for the Union College library.

Emory Evan Peter Memorial Endowment.—The late Mrs. Laura P. Dickey of Louisville, Kentucky, established an endowment fund in memory of her brother, Emory Evan Peter. The income from this fund will be used to help finance the college student-aid program.

Lewis Ogden Stiles Endowment Fund.—The late Mrs. Lewis Ogden Stiles of Waco, Texas, established this fund to memorialize her husband, Lewis Ogden Stiles, and his first wife, Pearl Long Stiles, both faithful United Methodists of Irvington, Kentucky. The income from this fund will be used to finance grants-in-aid under the college loan-grant program to United Methodist students planning to enter the ministry of the Kentucky or Louisville annual conferences.

Willson-Gross Lectures.—The late Dr. and Mrs. James Willson of Floydada, Texas, established a lectureship endowment in memory of Dr. and Mrs. John Owen Gross. The purpose of the lectures is to bring annually to the campus distinguished speakers to discuss vital issues confronting the Christian student.

Beverly P. and Mossie B. Wilson Trust Fund.—Dr. and Mrs. O. J. Wilson of Bowling Green, Kentucky, have established a memorial fund in memory of Dr. Wilson's mother and father. The first $100 income from the fund shall be used to support the annual "Beverly P. and Mossie B. Wilson Memorial Award in English." Income in excess of $100 shall be used for a revolving loan fund for students majoring in English.

Colutha J. Taylor Wright Memorial Fund.—Mr. J. S. Wright of Whitley City, Kentucky, has established an endowment fund in memory of his wife, Mrs. Colutha J. Taylor Wright. The initial sum was $1,000.

Awards

Alpha Psi Omega Award (National Dramatics Honor Fraternity); an Oscar to the male and an Oscar to the female who has contributed most toward drama at Union College, as selected by members of the Fraternity.

Art Club Award to the art judged most outstanding during the year.

The Bartlett Sociology Award in memory of Mrs. Ellen Sabina Bartlett of Iowa Falls, Iowa, to the student showing the greatest excellence in the field of sociology.

Senior Biology Award, by Dr. Theodore R. Davies, to the senior student showing the highest academic excellence in the field of biology.

Blackwell Memorial Award in Political Science, by the late Dr. Robert Lee Blackwell in memory of his mother, Mrs. Victoria Wolfe Blackwell, to the senior majoring in history and/or political science showing the highest academic excellence in the field of political science.

Erwin S. Bradley History and Political Science Award by Sherman Oxendine, Head of the Department of History and Political Science at Union College, to the senior with a major in history and minor in political science who has the highest scholastic average in grades earned at Union College.

Kathy Brick Memorial Award, by her parents, Mr. and Mrs. Theodore F. Brick, Dayton, Ohio, to the student showing the highest proficiency in competitive swimming.

The Burke Mathematics Award, in memory of Dr. A. R. Burke, of Binghamton, New York, to the student showing the greatest excellence in the field of mathematics, by Mrs. A. R. Burke.

The Chemistry Department Awards, in General Chemistry, Analytical Chemistry, Organic Chemistry, and Physical Chemistry. The award is given to the student who has completed the year course with the best all around average. Awards are furnished by the Chemistry Department faculty.

The Daniel Drinkard Memorial Award, by students of Union College and friends, through the Alumni Association of Union College, to the runner-up for the Athlete of the Year, the athlete who exemplifies the characteristics of desire, kindness, honesty, and personal integrity, as embodied in his personality and attitude. The award shall be presented each year at the Athletic Banquet and shall be in the form of a plaque kept in the trophy case in the Physical Education Building; a miniature plaque shall be given to the recipient of the award.

Eastern Kentucky Essay Award, by Dr. Kenneth H. Tuggle, trustee of Union College, to the student writing the best essay on Eastern Kentucky history.

Freshman Composition Award, by Dr. and Mrs. William B. Bjornstad, formerly of the faculty of Union College, to the student achieving highest writing excellence in freshman composition courses as determined by the English Department.

Gamma Beta Phi Award, a book, to the full-time student with the highest cumulative average in hours earned at Union College. In case of a tie, the award will go to the student with the greatest number of hours.

Dr. L. A. Geiss Award to the graduating senior majoring in business with the highest cumulative standing in that field.

Mrs. L. A. Geiss Award, to the student majoring in the Department of Home Economics achieving the highest academic standing in that field for the year.

Governor James D. Black Award, by the late Pitzer D. Black, to the senior with the highest scholastic average for the year.

Hubert H. Hoeltje Memorial Award, a copy of a book by the late Hubert H. Hoeltje (Professor of American Literature at Union, 1961-1968) to the undergraduate student who, in the judgment of the Head of the Department of English, has done the most perceptive work, in class and in written reports, in that field during the current academic year.

Iota Sigma Nu Awards to the freshman and the sophomore students with the highest scholastic average in their respective classes for the year.

The Laws and Esten Parks Award by Mr. S. Laws Parks, former vice president for business affairs of Union College, and Mrs. Parks, presented annually to the preministerial senior with the highest cumulative academic standing.

Literature Award, by the Tuesday Club of Barbourville, Kentucky, to the senior majoring in English who shows the greatest excellence in the field of literature.

Samuel A. Matthews Memorial Award, a book given by Robert D. Matthews to a preministerial student.

Dr. Paul Muncy Memorial Award, by the Board of Trustees, to the senior premedical student with the highest cumulative academic standing.

The School of Music Faculty Award, to a student majoring in music for interest, initiative, cooperation, musical ability, academics, and service to the department.

Student National Education Association Award, given by the John Owen Gross chapter to the graduating senior showing the greatest excellence in the field of education.

H. H. Owens History Award, by Mrs. H. H. Owens, to the student showing the greatest excellence in the field of history.

The H. B. Jones Business Enterprise Award, in memory of H. B. Jones, an attorney in Pineville and Louisville, Kentucky, whose business interests included coal mining, railroading, and construction. The $50 award is given to a student who, in the judgment of the Scholarship Committee of the faculty, has shown initiative and enterprise in the field of business.

President's Award by President Mahlon A. Miller to the senior who has the highest cumulative record in grades earned at Union College.

The Physical Education Faculty Award to the man and woman senior majors with the highest cumulative academic standing.

The Physics Award, by the Physics Faculty to the student showing the greatest excellence in general physics.

Sampson Political Science Award, by the late Governor Flem D. Sampson, to the junior showing the highest academic excellence in the field of political science.

The Hattie Stanberry Ecology Award, in memory of Miss Hattie Stanberry, a graduate of the Union College Academy and faculty member of the college in 1909-1910, who later became Mrs. H. B. Jones. The $50 award is given to the student or organization that, in the judgment of the Scholarship Committee of the faculty, has made a contribution to environmental improvement in the academic year.

The Thomas Storrar Memorial Award-Scholarship.—This annual cash award or scholarship is to be given to a student on Honors' Day who exemplifies the honesty, concern, and personal commitment to the Union College community which was displayed by the late Mr. Tom Storrar who was employed by the ARA Food Services at Union College. Circle-K Fraternity has initiated this fund.

Katherine V. Sutphen Memorial Award, by the Alumni Association of Union College, to the music student who has used his talents best during the year in serving Union College.

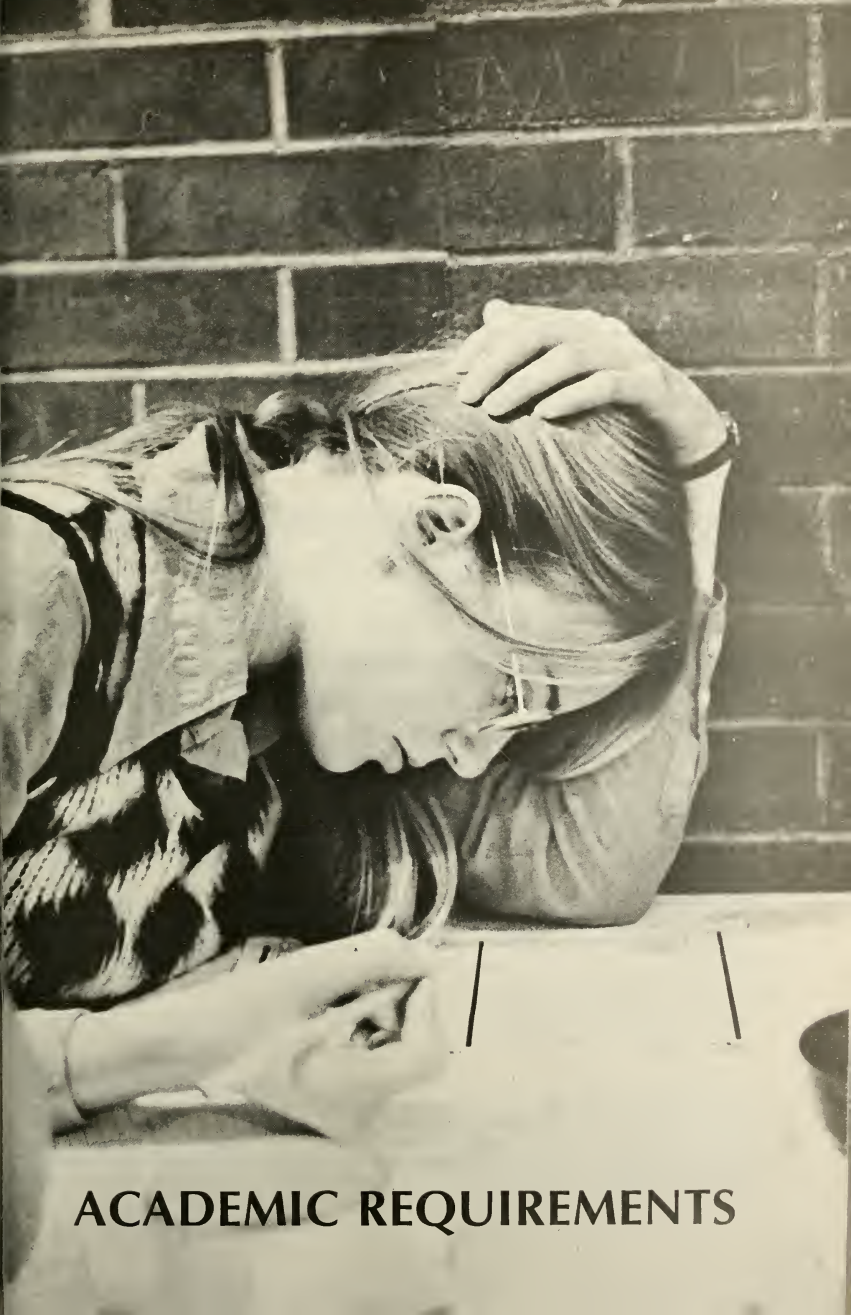
Judge W. W. Tinsley Family Memorial Award, by the late Mrs. Mayo Tinsley Rathfon, to the junior or senior preparing for a legal career showing the greatest promise for future success.

Union College Faculty Award, to the Varsity Letterman with the highest scholastic average for the year.

Beverly P. and Mossie B. Wilson Memorial Award in English, by Dr. and Mrs. O. J. Wilson to the student majoring in English with the highest cumulative grade point standing who has completed three full years of residence at Union College.

Cecil H. Wilson Award to the junior with the highest scholastic average for the year.

John Henry Wilson Award, given in memory of Mr. John Henry Wilson, former member of Congress from Barbourville, by his granddaughter, Mrs. Guy D. Attkisson, Jr., of St. Petersburg Beach, Florida, to the sophomore from the Fifth Congressional District of Kentucky who has the highest scholastic average for the year.



ACADEMIC REQUIREMENTS

Student Load

The normal undergraduate student load is sixteen semester hours per semester. Students who have an average academic standing may register for a maximum of eighteen semester hours credit per semester. Students who attain a "B" average are permitted to earn up to twenty-one semester hours per semester. Exceptions must be approved by the Division Chairman of the student's major.

The January Interim may be considered as part of the Fall Semester for tuition purposes at the student's option—i.e., the student may restrict his Fall load to a maximum of 14 hours and pay no tuition for the January term. This option is available only to full-time students.

The normal graduate student load is two-thirds that of the undergraduate.

The maximum load in each summer term is generally six semester hours. Students whose cumulative grade point average is "B" or better may request permission from the Division Chairman to take seven hours a term. Graduate students may take a maximum load of only six semester hours unless two courses elected total seven hours.

Class Attendance

1. Class attendance is required. Each student is responsible for all work from the first day of class and is expected to attend all meetings of the class for which he is registered. This is regarded as a matter of individual student responsibility.
2. All faculty members are expected to keep accurate records of class attendance.
3. Class absences due to circumstances beyond the control of the student will be excused by the teacher involved if request is made within one week of return to the campus. Class work or tests in these classes must be made up.
4. Class work and tests missed due to illness of the student can be made up only when the student presents the teacher with an excuse card signed by the College Nurse, within one week after he returns to class.
5. Class work and tests missed by a student while he is participating in an activity sponsored by Union College may be made up only when the faculty sponsor of such an activity signs the official absence list of students.
6. **A student is not automatically withdrawn when he stops attending a class.** Official withdrawals are made only on forms provided by the Registrar's Office. It is the student's responsibility to complete this form, obtain the signatures needed, and return it to the Registrar's Office.

Examinations and Reports of Marks

Examinations are held at the close of each semester. Tests are held at such times during each semester as the instructors may determine. Final marks are reported by the instructors to the Registrar. A copy of this report is given to the student, and a copy is sent to his parents if the student requests such action. Only final marks become a part of the permanent record.

The Marking System and Quality Points

Marks are reported in letters as follows:

A — Represents distinctly superior work, valued at four quality points for each semester hour.
B — Represents above average work, valued at three quality points for each semester hour.
C — Represents average work, valued at two quality points for each semester hour.
*Cr — Indicates that a course has been passed satisfactorily.
D — Represents inferior but passing work, valued at one quality point.
F — Indicates failure with 0 credits and 0 quality points for each semester hour.
W — Indicates that a student withdrew during the first nine weeks of the semester.
I — Indicates that some required work of the course has not been completed but that progress was satisfactory.

An "I" received at the end of any semester must be removed before the end of the next semester if the student is enrolled for that term. If the student is not enrolled, the "I" must be removed before the end of the 12-month period following the date on which the "I" was received. If an "I" is not removed within that time limit, it remains on the permanent record and cannot be made up.

A student who does not take final examinations at the end of a semester will be given temporary registration in the next semester within the time allowed for registration. All final examinations for courses which are prerequisite to courses in which the student may be enrolled the next semester must be taken by the end of the registration period. Failure in any of these prerequisite courses will cancel the student's enrollment in the advanced course.

Quality Point Standing

The quality point standing of a student is determined by dividing the total quality points which he has earned by the total number of semester hours for which he has registered minus the number of hours of Cr and Incomplete on his record.

Honor Students

Union College recognizes excellent scholarship in two ways—the Academic Honors list and graduation with honors.

Probation

Students falling below the following grade point average will be placed on Academic Probation:

Freshmen	1.70	Juniors	1.90
Sophomores	1.80	Seniors	2.00

If a student continues on probation for more than 2 semesters he will be ineligible for Union College aid, be limited to a maximum load of 12 hours, and be permitted to take only repeats of courses with D or F grades to raise his grade point average.

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*Students may take two courses per calendar year (June through May) on a Credit/non-Credit basis. Only two courses may be taken in a single discipline. A student must apply in the Registrar's Office for Cr/non-Cr before the last date for withdrawing from a course. When the instructor turns in a letter grade at the end of the semester, a D or above will be recorded as Cr.; and F will not be recorded at all, but the student loses the credit hours. This Cr/non-Cr option encourages students to take courses they otherwise might not attempt. The semester hours earned by Cr count, but no quality points are earned.

Suspension

Union College will not accept any credits earned at another institution while a student is under academic or disciplinary suspension from Union College.

Proficiency Examinations

With the consent of a professor, a student may take an examination and if the score is satisfactory, the normal semester hours of credit will be granted. Only credit may be earned by examination; no quality points are earned. Union College is also a regional testing center for the College-Level Examination Program, which provides credit for material mastered through self-study or unaccredited classes (See Special Programs section).

Extension and Correspondence

Any student planning to graduate from Union College must receive permission from the Registrar to register for correspondence or extension courses. Credits cannot be recorded unless prior arrangements are made.

Students enrolled for a full-time program of study shall defer work on all correspondence and extension courses during the term for which they are registered.

Not more than twelve semester hours of correspondence or extension work done in one academic year will be accepted by the College. Not more than one-fourth of the courses in a major may be completed by extension. Not more than thirty-two semester hours of extension and correspondence credit will be accepted toward a degree.

Not more than six semester hours extension or correspondence may be accepted during the senior year. Students with sixty semester hours or fewer at Union may offer six semester hours non-residence in the last thirty-six; students with sixty-one semester hours or more may offer six semester hours out of the last twenty-four.

Failures or quality point deficiencies in any course done in residence cannot be removed by extension or correspondence work.

Graduating seniors must complete any correspondence work needed for graduation at least three weeks before the date of Commencement.

Graduation Requirements

Requirements for Graduation—Bachelor of Arts Degree, Bachelor of Science Degree, and Bachelor of Music Degree (See Music Section).

The candidates must satisfy the following requirements:

1. Minimum of 128 semester hours. Thirty of the last thirty-six must be earned in residence at Union College. Students who have earned as many as sixty-one semester hours at Union College may graduate with only eighteen of the last twenty-four hours earned in residence. At least forty semester hours must be in courses numbered 300 and above.
2. Quality point standing of 2.00 overall and at Union, and in all courses taken in the major or minor fields.

3. Completion of the following General Requirements:

   I. English Composition — 6 hours

   II. Humanities: — 18 semester hours

   Approved courses in art; drama and speech; music; foreign language; religion; philosophy; English language and literature (other than English 355).

   III. Social Science: — 9 semester hours

   History; political science; psychology*; sociology; ~~economics~~; geography.

   IV. Natural Sciences: — 8 semester hours

   Biology; chemistry; mathematics; physics; general science.

   V. a. In II and III no more than six hours may be taken in any one discipline. In IV all eight hours may be taken in one discipline.

   b. Hours taken for a first major may not be counted toward the Group Requirements.

   c. Students taking a 48-semester hour area may count the area hours toward the Group Requirements.

4. For the Bachelor of Arts degree, two years of a foreign language offered by the college are required plus other graduation requirements. Students who have had a foreign language in high school should apply to the Head of the Department of Languages in regard to placement.

   Students who have had the equivalent of two years of foreign language at another college should see the Head of the Language Department about the requirements in language for graduation from Union.

5. For the Bachelor of Science degree the student must meet all graduation requirements, including a major or area. A foreign language may or may not be required as determined by the individual discipline.

6. Union College offers a Bachelor of Music degree. See Music Section for these requirements.

7. Completion of either:

   a. A major as determined by the faculty of the individual discipline.

   Majors are offered in Accounting; Applied Music; Art; Biology; Business Administration; Business Education (General Business, General Business—Accounting or General Business—Secretarial Practice); Chemistry; Community Health; Drama and Speech; Elementary Education; English; Health Education; History; Home Economics (non-vocational); Mathematics; Music Education; Philosophy; Physical Education; Physics; Psychology; Recreation; Religion; Secondary Education; Social Work; Sociology.

   Minors are offered in Accounting; Art; Biology; Business Administration; Chemistry; Computer Science; Drama and Speech; Economics; English; Health Education; History; Home Economics (non-vocational); Mathematics; Music; Office Administration; Philosophy; Physics; Political Science; Psychology; Recreation; Religion; Sociology.

   b. An area, the structure of which is determined by the faculty of the Division in which the area requirements are met.

   Areas are offered in Business, English, and Music.

8. At least forty semester hours offered for graduation must be earned in junior and senior courses (300 and above); at least six semester hours 300 and above, earned at Union, must be included in

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*Not acceptable as a Social Science in the Teacher Education Program.

any minor; at least nine semester hours 300 and above, earned at Union, must be included in any twenty-four hour major; at least twelve semester hours 300 and above (evenly distributed in the two fields if this is a combined major), earned at Union, must be included in a thirty hour major; at least eighteen semester hours 300 and above, earned at Union, must be included in an area.

9. At registration each senior must specify the tentative date on which he expects to graduate.

10. Advice in arranging schedules and choosing courses is always given gladly; however, each student is responsible for completing all requirements.

Associate Degrees

Union College offers Associate (two-year) degrees in Accounting; Computer Science; Medical Secretarial Administration; Office Administration; Recreation; Radiologic Technology.

See the appropriate division section for detailed requirements.

Two-year degree programs are also under development in other subject areas.

Combined Degrees

The bachelor degrees may be granted to students who have completed three years of work at Union College and one year of work in an accredited professional school, with the following provisions:

1. The work in the professional school must continue the curriculum in which the student has been enrolled at Union College (pre-law, pre-dentistry, pre-medicine, etc.).

2. The student must have completed satisfactorily the minimum requirements for three years of pre-professional work at Union College (ninety-six semester hours with a quality-point standing of at least 2.00) and also the general college requirements for graduation, including the foreign language requirement if a B.A. is desired.

3. The student must have completed satisfactorily the minimum requirements for one year of study at the accredited professional school in which he is enrolled. The number of credits at the end of the four years of study must total at least 128 semester hours.

Degrees With Distinction

Honors in scholarship are recorded on the diplomas of the students earning them, and published on the Commencement program. There are three grades of honors designated respectively: *cum laude, magna cum laude,* and *summa cum laude*. These honors are conferred at graduation upon students who satisfy the following conditions of scholarship:

The honor of *cum laude* is awarded to those students who have earned an average standing of 3.0(B), overall and at Union.

The honor of *magna cum laude* is awarded to those students who have earned an average standing of 3.5 overall and at Union.

The honor of *summa cum laude* is awarded to those students who have earned an average standing of 3.8 overall and at Union.

Students coming from other colleges may receive general honors on completing 61 semester hours of resident study and satisfying the conditions of scholarship prescribed by the faculty, provided they furnish also such evidence of high scholarship in the institution from which they come as may, in the judgment of the faculty, entitle them to become candidates for honors under the regulations.

As a reward for excellence in scholarship and to promote diligence in study and encourage high ideals, the honorary scholastic fraternity of Iota Sigma Nu was founded on May 26, 1936. Membership is open upon election to:

(a) All who have met the requirements for graduation with honors.
(b) All students who have at least 74 hours with a 3.2 quality point standing or 100 hours with a 3.0 quality point standing and who have completed a minimum of two years in residence at Union College.

Planned Curriculum

At the beginning of the junior year, a planned curriculum will be developed by the Division Chairman at the student's request. This is a binding agreement between the college and student. Once the curriculum has been completed only changes approved by the Registrar are binding on the college.

UNION

GRADUATE SCHOOL

"I believe that Man is intelligent enough, if given proper and sufficient education, to solve all the problems that confront him. If and when this is accomplished, the dedicated master teacher will play a major and decisive role in it. It has been my privilege to have spent the past forty-six years in this field with the last twenty-one in the field of teacher education. In my opinion there is no greater calling."

J. H. Boyd,
Dean of the Graduate School

The Union College Graduate School program is accredited by the Southern Association of Colleges and Schools and is approved by the State Department of Education of the Commonwealth of Kentucky.

The Graduate School offers the Master of Arts in Education degree with programs for the elementary school teacher, reading specialist for the elementary school, kindergarten teacher, high school teachers of English, social studies, health, and reading specialist. Holders of this degree are qualified for the Standard Certificate and Rank II in Kentucky and for comparable certification in other states. The Graduate school offers the Fifth Year Program for the renewal of the Kentucky Provisional Certificate.

In addition, the Graduate School is approved by the Kentucky State Department of Education to offer the forty-five semester hour programs leading to certification as Elementary and Secondary School Principals. Consortia arrangements have been made with several of the state universities in Kentucky and are now being planned with other universities whereby graduate students who have completed the forty-five semester hour programs leading to certification as a principal may transfer to these institutions and complete the requirements for the Rank I program without loss of credit or time. Further details on these programs may be obtained in the Office of the Dean of the Graduate School.

The Graduate Program at Union is designed primarily to provide advanced training for in-service teachers in the geographic area of the college. In addition to its regular academic year for the full-time graduate students, it provides summer sessions, Saturday classes, evening classes, extension classes, internships, field programs for research and study, and school-community assistance in solving school-connected problems.

Organization for Graduate Studies—The Graduate Studies Program has a Graduate Faculty, a Graduate Council, and a Dean of the Graduate School. The Graduate Council determines the policies, programs, curricula, and membership in the Graduate Faculty and in the graduate student body.

Types of Graduate Students—Graduate courses are open to: (1) students who enter and become candidates for the degree Master of Arts in Education; (2) students who are interested in the fifth year program for renewal of the provisional certificate to teach; (3) students with baccalaureate degrees who wish to broaden their education without reference to a graduate degree, and (4) students with or without a graduate degree who are interested in meeting the requirements for the Elementary or Secondary Principal's Certificate.

Requirements for Admission to the Graduate School—The applicant for admission must possess a baccalaureate degree from a regionally accredited four year institution. The applicant must file an application for admission, a $15.00 admission fee, and two copies of a transcript of all previous college work. For unconditional admission the transcript must show a sufficient and satisfactory undergraduate preparation. The student preparing for the Standard Secondary Certificate may select a major field of interest in which he has at least a minor of twenty-one semester hours. If he does not have at least a minor, he will be required to take work at the undergraduate and/or graduate level sufficient to develop a satisfactory minor.

Admission to the Graduate School is not equivalent to admission to Candidacy.

Admission to Candidacy for the Degree—A student will be admitted to candidacy for the degree Master of Arts in Education only after he has fulfilled the following requirements: (1) shown aptitude during a semester or full summer session (or an equivalent period of residence in Saturday or evening classes) to accomplish work of a graduate character (a minimum of twelve semester hours of graduate work with a grade point average of at least 3.0 fulfills this requirement); (2) possesses a valid teaching certificate based on four years of standard college preparation in the state in which it was issued; (3) satisfied any deficiency in oral or written English that has been reported by any member of the graduate faculty; (4) made written application to the Dean of the Graduate School for admission to candidacy for the Master of Arts in Education.

Each applicant for candidacy must have an interview with the Dean of the Graduate School.

Residence—A residence of at least one academic year or its equivalent in summer sessions and/or part-time work is required.

Time Limit—Students should fulfill the requirements for the Master of Arts in Education degree within five years. Extension of time for reasons acceptable to the Graduate Dean may be granted but all degree requirements must be completed within eight consecutive years. Credit earned over a longer period of time cannot be applied toward a degree.

Course Work—Candidates for the degree Master of Arts in Education must complete thirty semester hours of graduate work in courses with a quality point average of 3.0 or better. At least fifteen semester hours must be in courses open only to graduate students (courses numbered 500). At least nine semester hours must be in professional education. The remaining course work shall be determined by the Dean of the Graduate School and the Student's graduate committee in terms of the student's needs, provided that at least twelve semester hours shall be in approved field or fields of interest outside professional education. These twelve hours shall be selected to strengthen the academic specialization of the secondary teacher and/or to further develop the general education background of the elementary or secondary teacher. All such course work shall be approved upper division or graduate in level.

Twelve semester hours per semester for full-time students, six semester hours per semester for in-service teachers, and six semester hours per summer term shall constitute the normal load for graduate students.

Not more than six semester hours earned in a different but recognized institution may be transferred and credited to the Master of Arts in Education degree, provided that the work was completed in a recognized graduate school, is appropriate to the student's planned program, carries a grade of at least B, and provided that acceptance of transfer credit does not reduce the minimum period of one academic year at Union College.

No credit toward a Master of Arts in Education degree may be earned by correspondence.

Thesis—While the thesis is not required in any program leading to the degree, students with special research interests are encouraged to consider a thesis.

Comprehensive Examination—An oral and/or written examination covering professional education is required during the term in which graduation is scheduled. At the conclusion of the examination the student will be notified in writing whether he has passed or should do further graduate study.

Commencement—Candidates for the degree are expected to be present at commencement to receive the degree in person unless excused in writing by the Dean of the Graduate School at least two weeks prior to commencement. Such candidates must also pay an *in absentia* fee of $10.00.

ELEMENTARY EDUCATION PROGRAM

This program leads to Standard Elementary Certification and Rank II.

I. Professional Education — 9 semester hours

Selection from the following courses: Education 441G, 500, 501, 502, 530, 550, and 572. Education 530 and Education 500 or 572 are specifically required. Students who plan to work toward the principalship endorsement should take Education 572 rather than Education 500.

II. Specialization Component — 12 semester hours

Selection of courses outside the field of education to strengthen the specialization of the elementary school teacher and/or to further develop the general education background.

III. Electives — 9 semester hours

Education 503 is strongly recommended. Selection of courses to strengthen the preparation of the teacher. Students who have decided to continue their preparation in administration should use these electives to get a better foundation in the behavioral sciences.

KINDERGARTEN PROGRAM

This program leads to Standard Elementary Certification, Rank II, and Kindergarten endorsement.

I. Professional Education 9 semester hours

Selection from the following courses: Education 441G, 500, 501, 502, 530, 550, and 572. Education 530 and Education 500 or 572 are specifically required. Students who plan to work toward the principalship endorsement should take Education 572 rather than Education 500.

II. Specialization Component in Kindergarten 12 semester hours

Education 540, 542, and 545. All courses are required.

III. Electives 9 semester hours

Selection of courses from those listed in I above, or from the following: English 401G, 421G, Psychology 411G, 431G, 452G, 460G, 470G.

READING SPECIALIST PROGRAM

This program leads to Standard Elementary or Secondary Certification, Rank II, and Reading Specialist endorsement.

I. Specialization Component in Reading 12 semester hours

Education 530, 532, 535, and Psychology 525. All courses are required.

II. Courses for the Reading Specialist 12 semester hours

Selection of courses from the following: Education 441G*, 582, English 401G, 421G, and Psychology 411G*, 470G*.

III. Professional Education 6 semester hours

These six hours must be selected from II above, or from the following: Education 401G, 441G*, 500*, 501*, 502*, 503, 504, 550*, 572, and Sociology 511*.

*Nine semester hours must be selected from the courses marked with an asterisk. All students must take Education 500 or 572 as part of this requirement.

HEALTH PROGRAM

This program leads to Standard Secondary Certification and Rank II.

I. Professional Education 9 semester hours

Selection from the following courses: Education 441G, 500, 501, 502, 550, and 572. Education 500 or 572 is required. Students who plan to work toward the principalship endorsement should take Education 572 rather than Education 500.

II. Specialization Component in Health 12 semester hours

Courses should be selected from the following: Health 411G, 421G, 451G, 475G, 511, 541, 551, 582, and 595.

III. Electives 9 semester hours

Courses may be selected from I or II above. Students who have decided to continue their preparation in administration should use these electives to get a better foundation in the behavioral sciences.

ENGLISH PROGRAM

This program leads to Standard Secondary Certification and Rank II.

I. Professional Education 9 semester hours

Selection from the following courses: Education 441G, 500, 501, 502, 550, and 572. Education 500 or 572 is required. Students who plan to work toward the principalship endorsement should take Education 572 rather than Education 500.

II. Specialization Component in English 12 semester hours

Students must work closely with their Graduate English professor in the selection of English courses.

III. Electives 9 semester hours

Education 530 is specifically required. The remaining courses may be selected from I or II above. Students who have decided to continue their preparation in administration should use these electives to get a better foundation in the behavioral sciences.

SOCIAL STUDIES PROGRAM

This program leads to Standard Secondary Certification and Rank II.

I. Professional Education 9 semester hours

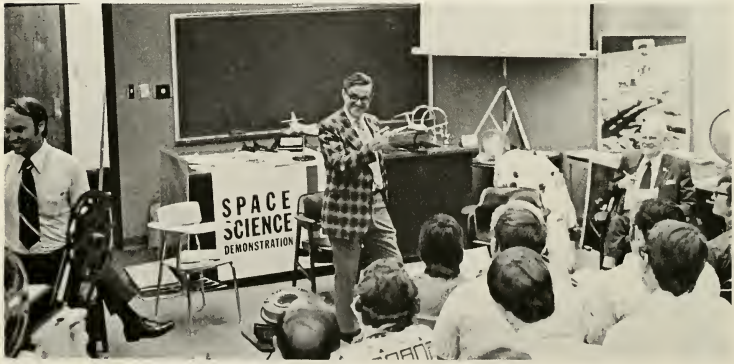
Selection from the following courses: Education 441G, 500, 501, 502, 550, and 572. Education 500 or 572 is required. Students who plan to work toward the principalship endorsement should take Education 572 rather than Education 500.

II. Specialization Component in Social Studies 12 semester hours

Students must work closely with their Graduate professor in selecting social studies courses.

III. Electives 9 semester hours

Courses may be selected from I or II above. Students who have decided to continue their preparation in administration should use these electives to get a better foundation in the behavioral sciences.



GENERAL EDUCATION PROGRAM

This program leads to Standard Secondary Certification and Rank II.

I. Professional Education 9 semester hours

Selection from the following courses: Education 441G, 500, 501, 502, 550, and 572. Education 500 or 572 is required. Students who plan to work toward the principalship endorsement should take Education 572 rather than Education 500.

II. Non-Professional Component 12 semester hours

These courses should be selected from the areas that will strengthen the academic specialization of the secondary teacher and/or to further develop the general education background.

III. Electives 9 semester hours

Courses may be selected from I or II above. Students who have decided to continue their preparation in administration should use these electives to get a better foundation in the behavioral sciences.

THE ELEMENTARY SCHOOL PRINCIPAL'S PROGRAM

This program leads to Standard Elementary Certification, Rank II, and Elementary Principal's endorsement. (Three years of successful teaching experience are required prior to the issuance of the principal's endorsement.)

I. Professional Education 9 semester hours

Selection from the following courses: Education 501, 502, 530, 550, and 572.

II. Specialization Component 12 semester hours

Psychology 411G and Sociology 511, plus six hours of non-education courses.

III. Electives 9 semester hours

Selection from the following courses: Education 401G, 441G, 503, 555E, 571, and 575.

Students meeting the requirements listed above will be eligible for the Standard Elementary Certificate and M.A. in Education Degree. For Principal's endorsement, all courses listed above (45 semester hours) must be completed.

THE SECONDARY SCHOOL PRINCIPAL'S PROGRAM

This program leads to Standard Secondary Certification, Rank II, and Secondary Principal's endorsement. (Three years of successful teaching experience are required prior to the issuance of the principal's endorsement.)

I. Professional Education 9 semester hours

Selection from the following courses: Education 501, 502, 550, and 572.

II. Specialization Component 12 semester hours

Psychology 411G and Sociology 511, plus six hours of non-education courses.

III. Electives 9 semester hours

Selection from the following courses: Education 401G, 441G, 504, 555S, 571, 575, and 582.

Students meeting the requirements listed above will be eligible for the Standard Secondary Certificate and M.A. in Education Degree. For Principal's endorsement, all courses listed above (45 semester hours) must be completed.

Fifth Year Program for Renewal of Provisional Teaching Certificates—All new provisional teaching certificates now issued in Kentucky on the basis of a four-year program and a bachelor's degree are valid for an initial period of ten years and shall be renewed upon "completion of a planned fifth year program of college work." The fifth year program is a mandatory requirement for all teachers, is available to all teachers, and will be planned appropriate to the needs of their respective teaching assignments. It is understood that the teachers involved are certified professionals who have already completed one teacher education program. They will not be subjected to further academic hurdles or screening processes, but will be continuously upgraded on the job through this program.

The following plans will satisfy the planned fifth year requirement for the renewal of the provisional teaching certificates and shall qualify a teacher for Rank II classification under the Foundation Law.

Plan I The completion of the requirements of the degree Master of Arts in Education at Union College.

Plan II The completion of a planned fifth year program in accordance with the following guidelines:

A. The fifth year program shall be planned individually with each applicant by the Dean of the Graduate School.

B. The fifth year program shall consist of thirty-two semester hours credit with an academic standing of no less than 2.2. At least eighteen semester hours must be earned at Union College in residence. At least twelve semester hours shall be graduate level course work. At least twelve semester hours shall be in professional education. At least twelve semester hours shall be from non-professional academic disciplines.

C. Credit earned by correspondence shall not apply toward the fifth year program.

Courses of Instruction—The Curricula section following lists both undergraduate and graduate courses. Those courses numbered 500 and above are open only to graduate students. All courses numbered in the 400's and followed by "G" are open only to upper division and graduate students. All other courses are open only to undergraduate students.

DIVISION PROGRAMS AND COURSE DESCRIPTIONS

"We can bury our heads in the sands of time or look to the horizons of the future, where the possibilities of growth and development are limited only by our imagination."

Robert E. Rose
Vice President for Academic Affairs

DIVISIONS OF INSTRUCTION

Division of Applied Science

- Accounting
- Business Administration
- Business Education
- Computer Science
- Economics
- Elementary Education
- Health
- Home Economics
- Library Science
- Office Administration
- Physical Education
- Recreation
- Secondary Education

Division of Natural Sciences

- Biology
- Chemistry
- Environmental Studies
- General Science
- Mathematics
- Physics

Division of Social Sciences

- History
- Political Science
- Psychology
- Social Work
- Sociology

Division of Humanities

- Applied Music
- Art
- Drama
- English
- Foreign Language
- Music Education
- Philosophy
- Religion
- Speech

Undecided Majors

Students who have not made a vocational or professional choice or who plan a general program leading to a professional degree program at a university not requiring a bachelor's degree for admission should confer carefully with their academic advisors and schedule their program from the general education courses of the college.

Course Numbering System

Courses numbered 100 or 200 are intended primarily for lower division students and 300 and 400 level courses are generally reserved for upperclassmen. Freshmen or Sophomores desiring to enter 300 or 400 level courses should confer with the division chairman involved for permission to enroll. 500 level courses are restricted to graduate students.

Courses with hyphenated numbers (101-102) are used when the first semester is prerequisite to the second.

Interdepartmental Numbers

Some special numbers are reserved for specific types of courses or studies. They may be used in any department although they are not shown in the following pages under the specific listings.

001—099	Non-credit special interest courses.
281, 481, 581	"Special Topics" courses—classes developed on a one-time, or experimental basis, or a special innovative class.
282, 482, 582	Special workshops, credit or non-credit.
283, 483, 583	Television courses through Kentucky Educational Television Network
284, 484	January interim courses not listed under a regular catalog number
285, 485	Experiential Education—internships, cooperative work experience, and vocational work experience.
287, 487	Field Practicums in specialized areas.
495, 595	Independent Study—individual research on approved topics not found in traditional courses. May be repeated on different topics.
599	Graduate Thesis.

"A teacher helps to lay the foundation for the careers of the leaders of the next generation."

Rena Milliken,
Chairman of the Division of Applied Sciences

Division of Applied Sciences

Rena Milliken, *Chairman*
Department of Business and Economics Department of Education
Department of Health and Physical Education

1. DEPARTMENT OF BUSINESS AND ECONOMICS

Rena Milliken, *Department Head*
Accounting — Business Administration — Business Education
Computer Science — Economics — Office Administration

Requirements for a Major in Accounting: Thirty semester hours including twenty-four hours in accounting and six hours in Business Law.

Requirements for a Major in Business Administration: Forty-five semester hours including six hours in Accounting, three hours in Marketing, three hours in Finance, three hours in Management, three hours in Business Law, three hours in Statistics, three hours in Business Policy, six hours of Economics including three hours of principles, three hours of Computer Science, and twelve hours of business electives.

Requirements for a Teaching Certificate: Students who meet the requirements listed below can secure the Provisional High School Certificate issued by the Kentucky State Department of Education. In addition the student must take the required courses in Education. Students planning to teach business should choose one of the following options:

Area in Business Education: Forty-eight semester hours including eight hours in Accounting, fourteen hours in Secretarial Practice (selected from Office Administration courses), eighteen hours in General Business (selected from Business Administration courses), and eight hours in Business electives, plus a course in Methods of Teaching Business Subjects.

Major in General Business: Thirty semester hours selected from Business Administration plus a course in Methods of Teaching Business Subjects.

Major in General Business—Accounting: Thirty-six semester hours including twelve hours selected from Business Administration, twelve from Accounting, and twelve from either field plus a course in Methods of Teaching Business Subjects.

Major in General Business—Secretarial Practice: Thirty-six semester hours including twelve hours selected from Business Administration, twelve from Office Administration, and twelve from either field plus a course in Methods of Teaching Business Subjects.

Major in Accounting—Secretarial Practice: Thirty-six semester hours including twelve from Accounting, twelve from Office Administration, and twelve from either field plus a course in Methods of Teaching Business Subjects.

Requirements for a Minor in Accounting: Twenty-one semester hours including eighteen hours in Accounting and three hours in Business Law.

Requirements for a Minor in Business Administration: Twenty-one semester hours including six hours in Accounting, three hours in Finance, three hours in Management, three hours in Business Law, three hours in Computer Science, and three hours in Principles of Economics.

Requirements for a Minor in Computer Science: Twenty-one semester hours including eighteen hours in Computer Science and three hours in Accounting.

Requirements for a Minor in Economics: Twenty-one semester hours.

Requirements for a Minor in Office Administration: Twenty-four semester hours including six hours in Typewriting, six hours in Shorthand, two hours in Office Machines, three hours in Business English, four hours in Office Practice, and three hours in Office Management.

Requirements for an Associate of Applied Science Degree in Accounting:

Freshman Year

Course	Hours
Freshman Composition	6
Principles of Accounting	6
Introduction to Data Processing	3
Introduction to Business	3
Office Machines	2
Typewriting	3
Business Mathematics	3
Humanities	3
Social Science	3
	32

Sophomore Year

Course	Hours
Business Law	3
Payroll Accounting	2
Accounting Electives	6
Business Electives	11
Natural Science	4
Electives chosen from college course requirements	6
	32

Requirements for an Associate of Applied Science Degree in Computer Science:

Freshman Year

Course	Hours
Freshman Composition	6
Principles of Accounting	6
Introduction to Data Processing	3
Business Mathematics	3
Algebra and Trigonometry	4
RPG	3
FORTRAN	3
Humanities	3
	31

Sophomore Year

Course	Hours
Payroll Accounting	2
COBOL	3
Statistics	3
Principles of Economics	3
Systems Analysis	3
Survey of Computer Systems	3
Electives chosen from college course requirements	6
Internship	10
	33

Requirements for an Associate of Applied Science Degree in Office Administration:

Freshman Year

Course	Hours
Freshman Composition	6
Typewriting	6
Shorthand	6
Introduction to Business	3
Business Mathematics	3
Office Machines	2
Payroll Accounting	2
Humanities	3
	31

Sophomore Year

Course	Hours
Business English	3
Business Communication	3
Office Practice	4
Office Management	3
Business Electives	7
Natural Science	4
Social Studies	3
Electives chosen from college course requirements	6
	33

Requirements for an Associate of Applied Science Degree in Medical Secretarial Administration:

Freshman Year

Course	Hours
Freshman Composition	6
Typewriting	6
Shorthand	6
Introduction to Business	3
Business Mathematics	3
Office Machines	2
Payroll Accounting	2
Humanities	3
	31

Sophomore Year

Course	Hours
Business English	3
Business Communications	3
Office Practice	4
Office Management	3
Medical Terminology	2
Physiology and Anatomy	3
First Aid and Safety	3
Personal and Community Health	3
Business Electives	3
Social Science	3
Electives	3
	33

Two year students may elect to receive the Associate in Arts or Associate in Science degree by completing the General Education requirements for the B.A. or B.S. degree.

Requirements for a Business Diploma in Office Administration:

Course	Hours
Freshman Composition	3
Typewriting	6
Shorthand	6
Introduction to Business	3
Office Machines	2
Business English	3
Office Practice	4
Principles of Accounting	3
Payroll Accounting	2
	32

ACCOUNTING

Accounting 171-172. Principles of Accounting. *Three Hours Each*
Procedures in journalizing, posting, financial statements, adjusting and closing entries, controlling accounts, and the voucher system.

Accounting 321. Payroll Accounting. *Two hours*
The Social Security Act and other laws relating to the payment of wages and salaries, the preparation of state and Federal tax returns, and the use of data processing in payroll accounting.

Accounting 341-342. Intermediate Accounting. *Three Hours Each*
Financial statements, working capital, investments, plant and equipment, stockholders' equity, analytical processes. *Prerequisite:* Accounting 172.

Accounting 421. Cost Accounting. *Three hours*
Methods of assembling cost data for materials, labor, and overhead consumed in a manufacturing enterprise. *Prerequisite:* Accounting 341.

Accounting 422. Auditing. *Three hours*
Verification, analysis and interpretation of accounting records. *Prerequisite:* Accounting 341.

Accounting 441. Tax Accounting. *Three hours*
Problems of accounting for all types of federal, state, and local taxes.

Accounting 442. Advanced Accounting *Three hours*
Accounting for partnerships, joint ventures, installment sales, consignments, home office and branch units, consolidated income statements, balance sheets, and surplus statements. *Prerequisite:* Accounting 342.

BUSINESS ADMINISTRATION

Business Administration 151. Introduction to Business. *Three hours*
Forms of business ownership, marketing, personnel management, finance, and government regulations.

Business Administration 152. Business Mathematics. *Three hours*
Fundamental processes involving percentage, interest, discount, payroll, taxes, and financial statements.

Business Administration 271. Principles of Marketing. *Three hours*
Study of the movement of goods from producer to consumer and an examination of the functions of the marketing process, marketing institutions, channels of distribution, legal aspects, and policy consideration.

Business Administration 272. Salesmanship. *Three hours*
The interpretation of sales techniques and methods, prospective customers, interviews, sales presentation, demonstration, closing the sale.

Business Administration 351. Principles of Finance. *Three hours*
Basic principles of finance including monetary and credit systems, the demand for funds in the capital market, factors affecting the supply of funds, and monetary and credit policies.

Business Administration 352. Principles of Management *Three hours*
The development of organization plans and policies, development of industrial relations, management operation with emphasis on skills and techniques of leadership.

Business Administration 371. Insurance. *Three hours*
Insurance contracts and the fields of insurance including fire, marine, casualty, social, disability, life and property.

Business Administration 372. Personnel Management. *Three hours*
Supervision of employees, policies relating to effective utilization of human resources in business concerns.

Business Administration 401. Statistics. *Three hours*
A study of the mathematics involved in statistical analysis and the effective use of statistical data in decision making.

Business Administration 411-412. Business Law. *Three Hours Each*
Laws dealing with contracts, agency, employment, bailment, transportation, real and personal property, leases, and bankruptcy.

Business Administration 451. Business Policy. *Three hours*
Analysis of management problems, formulation of alternative courses of action, determination of policy decisions.

BUSINESS EDUCATION

Business Education 361. Methods of Teaching Business Subjects. *Three hours*
Methods, materials, and techniques used in the teaching of bookkeeping, typwriting, shorthand, and general business subjects.

COMPUTER SCIENCE

Computer Science 231. Introduction to Data Processing. *Three hours*
Survey of basic computer concepts, hardware, and operations; introduction of basic programming concepts and documentation standards used in various programming.

Computer Science 233. FORTRAN Programming. *Three hours*
A study of the FORTRAN IV programming language on the IBM 1130 computer including evaluation, flowcharting, and solution of problems that are adaptable to business and/or science.

Computer Science 235. RPG Programming. *Three hours*
A study of the RPG programming language on the IBM 1130 computer oriented toward problems and reports related to business applications.

Computer Science 237. COBOL Programming. *Three hours*
A study of COBOL, a high level programming language which is adaptable to most business applications of any magnitude.

Computer Science 331. Systems Analysis. *Three hours*
A study in the analysis and organization of a system which can be adapted to a complete practical application. Students must be able to utilize concepts learned in the related computer science courses to accomplish this.

Computer Science 333. Survey of Computer Systems. *Three hours*
A comparative study of the various computer systems available, such as IBM, Honeywell, Univac, NCR, Mini Computer.

ECONOMICS

Economics 253-254. Principles of Economics. *Three hours each*
Elementary economic theory of prices, national income, production, and employment.

Economics 353. Consumer Economics. *Three hours*
The role of the consumer in handling his money.

Economics 363. Money and Banking. *Three hours*
National banking system, nature and functions of money, the importance of credit, bank deposits, and loans.

Economics 403. Labor Economics. *Three hours*
The labor market, wage and labor problems and theories, development of labor unions, wage and labor policies.

Economics 404. Investments. *Three hours*
Public and corporate securities, security markets, investment policies and tax problems.

The following courses may be counted as Economics:
History 241. American Economic History.
Sociology 281. Current Socio-Economic Problems.
Business 401. Statistics.

OFFICE ADMINISTRATION

Office Administration 111-112. Typewriting. *Three hours each*
A student with one or more high school units in typewriting cannot take Business 111 for credit.

Office Administration 121. Elementary Shorthand. *Three hours*
Principles of Gregg Shorthand, Diamond Jubilee Series.

Office Administration 122. Intermediate Shorthand. *Three hours*
Continuation of Office Administration 121.

Office Administration 221. Dictation and Transcription. *Three hours*
Emphasis placed on speed in taking dictation and in transcribing notes.

Office Administration 261. Office Machines. *Two hours*
Skill building in the use of common office machines.

Office Administration 301. Business English. *Three hours*
Using words effectively, language structure, punctuation.

Office Administration 302. Business Communication. *Three hours*
The methods and techniques of organizing business letters, memoranda, and reports, with intensive writing practice, in-class analysis, and student evaluation.

Office Administration 331. Office Practice. *Four hours*
The development of office proficiency. Laboratory required.

Office Administration 361. Office Management. *Three hours*
Office building. equipment, personnel supervision, control of office activities.

2. DEPARTMENT OF EDUCATION

H. Warren Robbins, *Department Head*

Education — Home Economics — Library Science

Application for Admission to Teacher Education Program. Formal application for admission to the Teacher Education Program is to be made with the Head of the Department of Education. It is desirable that the students apply during the second semester of the sophomore year.

A quality point standing of 2.00 is required for admission to the Teacher Education Program. A bulletin listing other criteria and the procedure for admission to the program, as well as to student teaching, may be secured from the office of the Head of the Department of Education.

Application for admission to the Teacher Education Program does not include an application for student teaching. A separate application for admission to student teaching must be filed with the Director of Student Teaching one full semester in advance of the time the Student Teaching is requested.

These new requirements will go into effect for students entering in the fall of 1975 and are subject to final approval by the Kentucky State Department of Education. Since changes might possibly occur, students should consult their advisors or the registrar before planning their program.

Students enrolled before 1975 and graduating before 1980 will complete the program under which they began.

ELEMENTARY EDUCATION CURRICULUM

I. General Education
   A. English Composition ..... 6 semester hours
   *B. Humanities ..... 18 semester hours
   Three semester hours must be in Literature; remaining hours to be taken from the following: Art; Drama and Speech; Music; Foreign Languages; Religion; Philosophy; English Language and Literature (other than English 355).
   C. Mathematics and Natural Science ..... 12 semester hours
   Biology, Chemistry, Mathematics, Physics, General Science. At least 4 semester hours shall be in the field of Physical Science and at least 4 semester hours shall be in the field of Biological Science.
   *D. Social Science ..... 12 semester hours
   History; Economics; Political Science; Sociology.
   E. Health and Physical Education in Elementary School ..... 3 semester hours

II. General Requirements
   A. Social Science ..... 3 semester hours
   B. Introduction to Psychology ..... 3 semester hours
   C. Children's Literature ..... 3 semester hours
   D. Structure of the Number Systems ..... 6 semester hours
   E. Elementary School Art ..... 3 semester hours
   F. Elementary School Music ..... 3 semester hours

III. Professional Preparation**
   A. Education 241—Introduction to Education ..... 3 semester hours
   B. Education 341—Methods of Teaching Math ..... 3 semester hours
   C. Education 351—Human Growth & Development ..... 3 semester hours
   D. Psychology 361—Psychology of Learning ..... 3 semester hours
   E. Education 361—Reading Instruction in the Primary Grades ..... 3 semester hours
   F. Education 362—Reading in the Grades Above the Primary ..... 3 semester hours
   G. Education 432—Methods and Materials in the Elementary School ..... 4 semester hours
   H. Education 433, 434—Supervised Student Teaching in the Elementary School ..... 10 semester hours

SECONDARY EDUCATION CURRICULUM

I. General Education
   A. English Composition ..... 6 semester hours
   *B. Humanities ..... 18 semester hours
   Three semester hours must be in Literature; remaining hours to be taken from the following: Art; Drama and Speech; Music; Foreign Languages; Religion; Philosophy; English Language and Literature (other than English 355).
   C. Mathematics and Natural Science ..... 12 semester hours
   Biology, Chemistry, Mathematics, Physics, General Science. At least 4 semester hours shall be in the field of Physical Science and at least 4 semester hours shall be in the field of Biological Science.
   *D. Social Science ..... 12 semester hours
   History, Economics, Political Science, Sociology
   E. Personal and Community Health ..... 3 semester hours

*No more than 6 semester hours in any one discipline.
**An overall grade point of "C" is required in courses listed under Professional Preparation.

II. General Requirements for Students Preparing for Teaching in Secondary School.
Majors, Minors, and Areas of Concentration**
An Area of Concentration ..... 48 semester hours
One Major ..... 30 semester hours
One Major of 30 semester hours and one Minor of 21 semester hours ..... 51 semester hours

Majors in subject combinations shall require 36 semester hours credit. In a combination of subjects for majors, not less than 12 semester hours shall be in each subject within the major. Method courses shall be in addition to those in the majors and minors. Education 362 is required of students preparing to teach English.

III. Pre-Professional Preparation
A. Introduction to Psychology ..... 3 semester hours
B. Electives which may include such courses as Sociology, Anthropology, Psychology, Biology, Philosophy, etc.
(These courses may have been completed as general education) ..... 15 semester hours

IV. Professional Preparation for Secondary Teachers***
A. Education 241—Introduction to Education ..... 3 semester hours
B. Education 351—Human Growth & Development ..... 3 semester hours
C. Psychology 361—Psychology of Learning ..... 3 semester hours
D. Education 452—Methods and Materials in the Secondary School ..... 4 semester hours
E. Education 453, 454—Supervised Student Teaching in Secondary Schools ..... 10 semester hours

EDUCATION

Education 241. Introduction to Education. *Three hours*
The purpose and function of education. Classroom and school organization, guidance services, library services, evaluation, reporting to parents and other phases of the school program. First and second semesters.

Education 341. Methods of Teaching Mathematics in Elementary School. *Three hours*
Modern methods and materials for teaching mathematics in the elementary school. *Prerequisite:* Mathematics 203 or equivalent. Second semester.

Education 351. Human Growth and Development. *Three hours*
Basic concepts for understanding the development of the child and the adolescent. Includes observation. First and second semesters.

Education 361. Reading Instruction in the Primary Grades. *Three hours*
Methods and materials for the teaching of reading in the primary grades including observations, micro-teaching demonstrations, making of lesson plans, and evaluation of a child's readiness.

Education 362. Reading in Grades above the Primary. *Three hours*
Emphasis on study skills, individualized programs and reading in the content subjects.

Education 401G. Introduction to Counseling and Guidance. *Three hours*
Educational, sociological, and psychological foundations of counseling and guidance in schools, colleges and related service oriented agencies. Essential counseling and guidance services, policies, practice and procedures.

Education 432. Methods and Materials in the Elementary School. *Four hours*
Emphasis on language arts, social studies, and science; directed observation; taken with Education 433-434. *Prerequisites:* Education 241, 341, 351, 361, and 362; 90 semester hours college credit; quality point standing of 2.00, overall and at Union College; one semester residence; and admission to the Teacher Education Program at Union College. No late registration.

**Choose one of the three (3) options listed.
***An overall grade point of "C" is required in courses listed under Professional Preparation.

Education 433, 434. Supervised Student Teaching in the Elementary School. *Five hours each*
Laboratory experiences in working with children, teachers, and others in school and community. Supervision by a qualified classroom teacher. Taken with Education 432 for a period of 10 weeks. Transportation and meals paid by the students. Application to be made one semester in advance.

Education 435. Laboratory Experiences in Education. *Five hours*
A substitute for student teaching for elementary majors. Considers current problems and trends in teaching with laboratory periods for construction of classroom materials. *Prerequisites:* One year of successful classroom teaching experience; Education 241 and 432; scholastic standing of 2.00 or above; completion of 90 semester hours; approval by the Committee on Teacher Education; and one semester residence at Union College.

Education 436. Laboratory Experience in Education. *Five hours*
For elementary majors with same course content and prerequisites as 435 except that four or more years of successful classroom teaching experience must have been completed.

Education 441G. Measurement and Evaluation. *Three hours*
Instruments and techniques for evaluating abilities, aptitudes, personality traits, and interests will be examined and teacher-made evaluative instruments will be given special emphasis. Application of test results to vocational and educational guidance is to be stressed.

Education 452. Methods and Materials in the Secondary School. *Four hours*
Current teaching methods, materials, and innovations in the secondary school with directed observations. *Prerequisites:* Education 241 and 351; 90 semester hours of college credit; quality point standing of 2.00 overall and at Union College; one semester of residence; and admission to the Teacher Education Program at Union College. In addition, a quality point standing of 2.00 or above is required in areas of concentration, major, and minors. No late registration.

Education 453, 454. Supervised Student Teaching in the Secondary School. *Four or five hours each*
Under the direction of an experienced teacher, the student teacher directs the usual teaching activities in the classroom for 10 weeks in local public schools. Application should be made one full semester in advance of the time the teaching is to be done. *Prerequisite:* Completion of Education 452.

Education 455. Laboratory Experiences in Education. *Five hours*
A substitute for student teaching for secondary majors. Considers current problems and trends in teaching with laboratory periods for construction of classroom materials. *Prerequisites:* One year of successful classroom teaching experience; Education 241 and 452; scholastic standing of 2.00 or above; completion of 90 semester hours; approval by the Committee on Teacher Education; one semester of residence at Union College.

Education 456. Laboratory Experiences in Education. *Five hours*
For secondary majors with same course content and prerequisites as 455 except that four or more years of successful classroom teaching experience must have been completed.

Education 460G. Learning Disabilities. *Three hours*
A study of specific learning disorders resulting in discrepancy between potential and performance in academic tool areas. Emphasis placed on the classroom teacher's role in remediations.

Education 495. Independent Study. *Three hours*
Open only to advanced students in the field of Education who wish to do intensive reading in a specific interest area. *Prerequisites:* Twelve semester hours of Education and permission of the Head of the Department.

Education 500. Research and Current Literature in Education. *Three hours*
Review of research findings in current literature. Half of the time to be devoted to techniques in research.

Education 501. History and Philosophy of Education. *Three hours*
Education in the United States. An analysis of the growth of various educational philosophies and the relation of these to modern educational practice.

Education 502. Curriculum Theory and Development. *Three hours*
Curricular organization, materials, and methods. Techniques for evaluating and constructing curricula.

Education 503. Elementary School Curriculum. *Three hours*
Curricular organization, materials, and methods currently used in elementary schools. Techniques for evaluating and constructing curricula.

Education 504. Secondary School Curriculum. *Three hours*
Curricular organization, materials, and methods currently used in secondary schools. Techniques for evaluating and constructing curricula.

Education 525. Psychology of Reading Through Supervision. *Three hours*
Basic concepts and principles of learning with its application to reading.

Education 530. Diagnostic and Remedial Procedures in Reading. *Three hours*
Current research findings in diagnostic and remedial procedures in reading. Techniques for applying diagnostic instruments for locating causes of serious reading deficiencies are developed along with suggested remedial procedures.

Education 532. Techniques and Materials for Remedial Reading. *Three hours*
Techniques and materials appropriate to the correction of reading difficulties. *Prerequisite:* Education 530.

Education 535. Practicum in Teaching Reading with Clinic. *Three hours*

Education 540. Introduction to Early Childhood Education. *Three hours*
Survey of the physical, emotional, mental, and psychological development of the child under six, and the role of the kindergarten teachers in working with such a child.

Education 542. Fundamentals of Kindergarten Education. *Three hours*
This course focuses primarily on kindergarten curriculum, materials, organization of the kindergarten program, creative experiences for the pre-school child, parent education and home visitation, understanding of families, community resources, planning learning experiences, and evaluation of pupil programs and progress. Direct observation and participation in the kindergarten setting.

Education 545. Practicum in Kindergarten Education. *Six hours*
This course offers direct, guided, supervised experiences with kindergarten children under the supervision of a qualified classroom teacher. This course also may be taken at the undergraduate level as part of the required Supervised Student Teaching.

Education 550. Improvement of Instruction Through Supervision. *Three hours*
Democratic school procedures and the methods for improving instruction, evaluation of means, methods, and results of action.

Education 555E. The Elementary School Principal. *Three hours*
An analysis of the elementary school building unit as a sub-system within a larger complex organization. Special emphasis on the changes in the role of the elementary school principal as a result of changes in society and in the schools.

Education 555S. The Secondary School Principal. *Three hours*
An analysis of the secondary school building unit as a sub-system within a larger complex organization. Special emphasis on the changes in the role of the secondary school principal as a result of changes in society and in the schools.

Education 560. Supervision of Student Teaching. *Three hours*
Experiences deemed necessary for developing students into effective teachers are considered, with attention to participation in teacher-student conferences and planning and executing a work program. *Prerequisite:* One year of teaching experience or consent of the instructor.

Education 561. Internship for the Supervising Teacher. *Two-four hours*
A followup course for Education 560, primarily in the field with part time on the campus in seminars, reports of action research with and about student teaching, honors reading, and evaluation. Open only to those who have had Education 560 and who have a student teacher during the course.

Education 571. School Organization and Administration. *Three hours*
Organization of the modern public school, an understanding of such problems as staff-teacher relationships, program of studies, teacher records and reports, personnel and public relations, utilization of teacher time and of physical facilities.

Education 572. Methods of Educational Research. *Three hours*
Types of research, selection of problems, collection and classification of data; organization, presentation, and interpretation of materials.

Education 575. Seminar in Administration. *Three hours*
A total of 90 clock hours in a practicum situation under a qualified administrator in a public school is required with a written record of experiences. A seminar at end of practicum held on campus. *Prerequisite:* Education 555E or 555S.

Education 582. Television and other Educational Media Workshop. *Three hours*
Summer only. Gives practice in operating educational media and construction of classroom materials. Emphasis given to educational television use in the classroom.

Education 595. Graduate Independent Study. *Three hours*
Guided study and research toward the solution of specific educational problems encountered by members of the seminar.

Education 599. Thesis. *Six hours*

LIBRARY SCIENCE

Library Science 133. Information Aids to Learning *One hour*
A study of the techniques and basic tools of information.

HOME ECONOMICS

The curriculum is in general home economics with no specialization within the field.

The first two years will be accepted by certain institutions as two years toward the Smith-Hughes or Vocational Home Economics Program.

Union College has a written agreement with the University of Kentucky whereby Union College home economics graduates can obtain a vocational teacher's certificate and a master's degree in home economics education if the graduate meets the requirements of the College of Education at the University of Kentucky. See the suggested undergraduate program to prepare for joint vocational certification and graduate program in home economics at the University of Kentucky.

Individual courses may be selected by a student majoring in other departments.

Requirements for a Major: Thirty semester hours in Home Economics and Chemistry 111 and 112. At least eighteen semester hours must be taken in the Home Economics Department and must include 172, 212, 391, and 431.

Requirements for a Minor: Twenty-one semester hours in Home Economics. At least twelve hours must be taken in the Home Economics Department and must include 172 and 212.

Suggested Four Year Home Economics Program

The following suggested four year home economics program will enable the student to obtain a provisional teacher's non-vocational high school certificate.

Freshman Year	Sem. Hrs.
English Composition	6
Social Science	6
Biological Science	4
Home Ec. 171 or Home Ec. Elective	3
Home Economics 172	3
Psychology 111	3
Humanities	6
	31

Sophomore Year	Sem. Hrs.
Chemistry 111-112	8
Literature	3
Intro. to Education	3
Sociology 271 or Social Studies Elective	3
Art 201 or Humanities Elective	3
Psychology 210 or Pre-professional course	3
Home Economics 211 or Home Economics Elective	3
Home Economics 212	3
Electives	3
	32

Junior Year	Sem. Hrs.
Home Economics 391	3
Home Economics Electives	9
Humanities	3
Economics 382 or Social Science Elective	3
Health 280	3
Education 351	3
Electives	9
	33

Senior Year	Sem. Hrs.
Humanities	3
Methods & Materials in Student Teaching	4
Student Teaching	10
Home Economics 431	2
Home Economics 432 or Home Economics Elective	2
Home Economics Elective	3
Electives	8
	32

Suggested undergraduate program to prepare for joint vocational certification and graduate program in Home Economics Education at the University of Kentucky.

I. General Education

Humanities	27 hours
English Composition—9 hours	
Art—6 hours to be selected from:	
Art 132, Introduction to Art	
Art 202, Art Fundamentals	
Art 373-374, Art History	
Literature—3 hours to be selected from:	
English 221-222, Survey of English Literature	
English 341-342, Survey of American Literature	
Speech 131, Fundamentals of Speech—3 hours	
Electives—6 hours (no more than 6 hours from any one discipline).	
Natural Science	12 hours
Biology—4 hours	
Chemistry 111-112, General Chemistry—8 hours	
Social Science	15 hours
Psychology 111, Introduction to Psychology—3 hours	
Sociology—3 hours	
Economics—3 hours to be selected from:	
Economics 341-342, Principles of Economics	
Electives—6 hours (no more than 6 hours from any one discipline and does not include psychology).	
Education	6 hours
Education 241, Introduction to Education—3 hours	
Education 351, Human Growth and Development—3 hours	
Health	3 hours
Elective—3 hours	
Total General Education	63 hours

Note: At least forty semester hours must be in courses numbered 300 and above.

II. Home Economics

Textiles and Clothing: 9 hours
- H. Ec. 211, Principles of Clothing Construction and Selection—3 hours
- H. Ec. 212, Tailoring—3 hours
- H. Ec. 401, Textiles—3 hours

Management and Family Economics: 10 hours
- H. Ec. 341, Management of Family Resources—3 hours
- H. Ec. 431-432, Home Management & Family Relationships Laboratory—4 hours
- Economics 353, Consumer Economics—3 hours

Human Development and Family Relations: 10 hours
- Psychology 210, Child Development—4 hours
- Sociology 271, Marriage and the Family—3 hours
- H. Ec. 495, Child Guidance—3 hours

Nutrition and Food Service: 9 hours
- H. Ec. 171, Principles of Food Preparation—3 hours
- H. Ec. 172, Meal Planning and Service—3 hours
- H. Ec. 391, Principles of Nutrition—3 hours

Housing and Interior Design: 9 hours
- Art 201, Art Fundamentals—3 hours
- H. Ec. 380, Household Equipment—3 hours
- H. Ec. 451, Interior Design—3 hours

Health: 3 hours
- Health 280, Personal and Community Health—3 hours

Total Home Economics ..... 50 hours

III. Electives 15 hours

Total Hours 128 hours

Home Economics 171. Principles of Food Preparation. *Three hours*
Elementary principles of food preparation; analysis of basic recipes; developing techniques in the kitchen. First semester.

Home Economics 172. Meal Planning and Serving. *Three hours*
Selecting, purchasing, preparing, and serving meals for various occasions. *Prerequisite:* Home Economics 171 or equivalent. Second semester.

Home Economics 211. Principles of Clothing Construction and Selection. *Three hours*
Selection of designs and fabrics; use of commercial patterns; techniques in fundamental construction process in making simple garments; use of sewing machine and attachments. First semester.

Home Economics 212. Tailoring. *Three hours*
Design in clothing and tailoring; the principles and practices involved in the tailoring of women's and men's coats and suits. Custom tailoring techniques used. *Prerequisite:* Home Economics 211 or equivalent. Second semester.

Home Economics 341. Management of Family Resources. *Three hours*
Philosophy and principles of home management. Study of the mechanics of time, energy, and money management. First semester alternate years.

Home Economics 380. Household Equipment. *Three hours*
A study of the selection, arrangement, operation, care and demonstration of household equipment. Second semester, alternate years.

Home Economics 391. Principles of Nutrition. *Three hours*
Diet problems; study of nutrients and their relationships to health. Second semester.

Home Economics 401. Textiles. *Three hours*
Textile fiber, yarns, and fabrics; their source, productions, manufacture, properties and identification. The selection, use, and care of modern textiles. Second semester, alternate years.

Home Economics 431-432. Home Management and Family Relationships Laboratory. *Two hours*
Each student is limited to four hours credit. A residence period in the Home Management House is required of seniors majoring in Home Economics. Experience in the application of principles presented in other courses. Admission by permission of the instructor. First and second semesters.

Home Economics 451. Interior Design. *Three hours*
Study of the major elements used in interior design emphasizing fabric and color schemes. Practical and aesthetic basis of design in the home. First semester, alternate years.

Home Economics 495. Independent Study. *Three hours*
The student selects a problem and works under the supervision of the instructor. Designed for the advanced student.

The following courses may count toward a home economics major or minor:

Art 201-202 Art Fundamentals
Psychology 210 Child Development
Sociology 271 Marriage and the Family
Health 280 Personal and Community Health
Education 351 Human Growth and Development
Economics 353 Consumer Economics

3. DEPARTMENT OF HEALTH AND PHYSICAL EDUCATION

Paul S. Moore, *Department Head*
Health — Physical Education — Recreation

HEALTH

Students preparing to teach in an elementary or secondary school in Kentucky are required to complete the following courses: for an elementary certificate, Health and Physical Education in the Elementary School; for a secondary certificate, Personal and Community Health.

Requirements for a Major in Health Education: For students choosing to get a teaching certificate, thirty semester hours from the courses listed under the Health department including 280, 330, and 340. In addition to the courses listed under the Health department, the following courses may be taken as electives to be included in the thirty semester hours: Sociology 271, Sociology 311, Home Economics 391, and Psychology 431G.

Requirements for a Minor in Health Education: Twenty-one semester hours which must include Health 280, 330, and 340. Courses must be chosen from those listed under Health Education major.

Requirements for a Major in Community Health: For students choosing not to get a teaching certificate, thirty semester hours which must include 280, 340, and 421G. The remaining hours should be selected from the following suggested courses: 231, 475G, and 485. In addition, the following courses may be taken as electives in the thirty hours: Sociology 271, 311, Home Economics 391 and Psychology 431G.

Health 231. First Aid and Safety. *Three hours*
Designed to aid the student in developing an understanding of the basic principles of accident prevention as applicable to the home, the highway, and the school. Special attention is directed to first aid and measures for various injuries and illnesses.

Health 280. Personal and Community Health. *Three hours*
The relationship of bodily functions to personal health and grooming, and to community and national health.

Health 330. School Health Practices. *Three hours*
A course dealing with the primary phases of school health—health instruction, health services, and healthful school environment—and how they can be coordinated into a functional health program.

Health 340. Physiology and Anatomy. *Three hours*
Basic instruction in the functioning of the cells, organs, and systems of the human body.

Health 411G. Health Education in the Secondary School. *Three hours*
The experiences, activities, and instruction of secondary students that lead to intelligent self-direction of health behavior.

Health 421G. Community Health. *Three hours*
The social and cultural factors, the physical environment, and the health agencies and services as they relate to the health of the community.

Health 451G. School and Community Health Workshop. *Three hours*
Reveals the relationship needed between the school and community to promote the total health of the population. Speakers are secured from official agencies, voluntary agencies, professional agencies, sponsored agencies, and other colleges. Small groups are utilized for discussion, field trips, and study through audio-visual aids.

Health 475G. Critical Areas in Health. *Three hours*
Specific health problems confronting society today with particular reference to secondary age students.

Health 485. Field Experiences in Health. *Three to Six hours*
A directed field experience in some phase of health, with consideration given to both the needs and interests of the student. Opportunities will be available for practical experiences in the school situation, official health agencies, and voluntary agencies.

Health 495. Independent Study. *One to Three hours*
Independent study for advanced students only.

Health 511. The School Health Program. *Three hours*
Administrative arrangements found in school health programs and the utilization of administrative techniques and school personnel in conducting an efficient health program.

Health 541. Scientific Foundations of Health Education. *Three hours*
A study of the scientific aspects of health as they relate to personal, family, and community health.

Health 551. Readings. *Three hours*
A course enabling the student to research the literature in the area of health, not only to increase his basic knowledge, but to acquaint him with current trends and issues.

Health 582. Safety Workshop. *Three hours*
Accident problems in the home, in the school, at work, and on the highways are discussed with the purpose of being able to influence those who teach by preparing them in the various areas of safety. Groups specialized in a variety of safety areas, such as National Safety Council, American Red Cross, Bureau of Mines, and Kentucky State Police will be utilized.

Health 595. Independent Study. *Three hours*
Independent study in the field of health. Could include practical field experiences.

PHYSICAL EDUCATION

A maximum of eight semester hours of service courses may be credited toward graduation. Physical Education majors must take four service courses. This is the maximum that can be applied to a major, but others can be taken as electives.

Requirements for a Major in Physical Education: Thirty semester hours which must include 351, 361, 421, Health 340, and four service courses. In addition the following courses may be taken as electives to be included in the thirty hours: Recreation 265, 321.

Service Courses

111 Beginning and Intermediate Swimming
113 Senior Life Saving
121 Team Sports
131 Archery and Badminton
132 Beginning Golf
133 Beginning Tennis
135 Tumbling and Trampolining
141 Folk Dancing
142 Social Dancing

Physical Education 241. History of Physical Education *Two Hours*
From primitive man through the present, with particular emphasis on Greek physical education, European systems, and development of physical education in America. Some research into the history of various sports.

Physical Education 261. Health and Physical Education in the Elementary School. *Three Hours*
The role of the classroom teacher in physical education on the playground, in the gymnasium, and in the classroom. How to correlate and evaluate. The application of games, movements, exploration, rhythms, and self-testing activities, and screening tests.

Physical Education 271. Sports Officiating. *Two Hours*
Rules and officiating techniques in football, basketball, baseball, and track.

Physical Education 291. Principles of Dance. *Two Hours*
Elementary rhythms, folk, square, social and modern dance.

Physical Education 302. Coaching Basketball *Two Hours*

Physical Education 303. Water Safety Instruction. *Two Hours*
Prerequisite: Senior Life Saving (113)

Physical Education 304. Coaching Baseball. *Two Hours*

Physical Education 305. Coaching Track and Cross Country. *Two Hours*

Physical Education 317. Organization and Administration of Intramurals. *Three Hours*
Planning, organizing, and directing a program of intramural activities for men and women. Attention is given to activities, awards, officials, finances, publicity, and other factors necessary to consider in administering an intramural program.

Physical Education 320. Adapted Physical Education. *Three Hours*
Health conditions which require the physical education program to be adapted to meet the special needs of the atypical student.

Physical Education 351. Tests and Measurements in Physical Education. *Three Hours*
Evaluating physical education by the construction and administering of tests. Emphasizes reliability, objectivity, and validity of tests, and the use of test results, motivation and school marks.

Physical Education 361. Organization and Administration of Health and Physical Education. *Three Hours*
Administration of health and physical education in school. Setting up the program, and evaluating results. Emphasizes budget and finance, office management, preparing the curriculum, facilities, legal factors, and public relations.

Physical Education 421. Anatomy and Kinesiology. *Three Hours*
An analysis of human motion and its relation to athletic and gymnastic activities; practical application of these principles.

Physical Education 435. Coaching and Officiating Team Sports. *Three Hours*
Theory and practice of techniques employed in field hockey, volleyball, softball, and soccer, with emphasis on methods of teaching.

Physical Education 491. Seminar in Conducting Physical Activities. *Three Hours*
Seminar on the problems involved in the teaching of physical skills in the required program with an opportunity to gain practical experience.

Physical Education 495. Independent Study. *Three Hours*
Independent work for advanced students only.

RECREATION

Requirements for a Major in Recreation: Thirty semester hours including 241, 321, and 472. Remaining hours should be selected from the following: 265, 345, and 485. In addition, courses may be selected from the following to be included in the thirty semester hours: P.E. 111, 113, 121, 131, 132, 133, 135, 141, 142, 271, 291, 303, 317; Health 231; Art 241; Drama 331; Music 161.

Requirements for a Minor in Recreation: Twenty-one semester hours which must include 241, 321, and 472. Other courses must be chosen from those listed under Recreation.

Requirements for the Associate of Arts Degree in Recreation:

Freshman Year

Course	Hours
Freshman Composition	6
Introduction to Sociology	3
Foundations of Music	4
Safety and First Aid	3
Recreational Arts and Crafts	3
Foundations for Recreation	3
Physical Education Electives	2
Electives chosen from the general college course requirements	8
	32

Sophomore Year

Course	Hours
Principles of Dance	2
Recreational Sports and Activities	3
Sports Officiating	2
Personal and Community Health	3
Field Experiences	6
Organizations and Administration of Intramurals	3
Recreational Leadership	3
Physical Education Electives	2
Electives chosen from the general college course requirements	8
	32

Recreation 241. Foundations for Recreation. *Three Hours*
This course is designed as an introduction to the recreation profession. The nature of recreation, the influence of leisure, the recreation philosophy, and employment possibilities are explored.

Recreation 265. Recreational Sports and Activities. *Three Hours*
Presents students with information on various types of sports and activities, with emphasis on history, rules, equipment, skills, and techniques.

Recreation 285. Field Experiences in Recreation. *Three to Twelve hours*
Experience in recreation planning, leadership, supervision, and programs through work in private, public, and voluntary community recreation.

Recreation 321. Recreational Leadership. *Three Hours*
Leadership techniques in music, social games, arts and crafts, dramatics, camping, nature, and sports. Designed to aid students in enriching their own leisure time and to prepare for leadership in teaching, full-time Christian service, and social service.

Recreation 345. Outdoor Recreation. *Three Hours*
Develop a knowledge and understanding of outdoor activities as they relate to a variety of settings.

Recreation 472. Planning Recreation Programs. *Three Hours*
Comprehensive course in recreation program planning, development, and leadership techniques with individuals and groups. Students plan a one-year program.

Recreation 485. Field Experiences in Recreation. *Three to Twelve hours*
Same course description as 285

Recreation 495. Independent Study. *Three Hours*

"Studies in the humanities are vital in dealing with present-day problems. Knowledge of the humanities sharpens moral consciousness, fosters logical modes of thought, and leads to increased recognition of fundamental truths."

Allan E. Green,
Chairman of the Division of Humanities

Division of Humanities

Allan E. Green, Chairman

Department of Fine Arts — Department of Languages

Department of Religion and Philosophy

1. DEPARTMENT OF FINE ARTS

Leo E. Dontchos, *Department Head*

Art—Drama and Speech—School of Music

ART

Requirements for a Major in Art: Thirty semester hours, with a curriculum which contains a core of eighteen hours, including Art Fundamentals (201-202), Drawing and Painting (341-342) and Art History (373-374). The remaining twelve hours may be tailored, in consultation with the faculty, to suit the student's interests and needs. This should be accomplished by the end of the sophomore year. As soon as such a program is agreed upon, it becomes an individualized curriculum for the student Changes may be made only with the approval of the student, the student's faculty advisor, and the Head of the Department of Fine Arts. Exhibitions are required of all art majors. Details are available from the Department of Fine Arts.

Requirements for a Minor in Art: Twenty-one semester hours, to include the eighteen hour core specified above, and one advanced studio course.

The Department reserves the right to retain a maximum of two works of art from each student enrolled in a studio course.

Art 132. Introduction to Art. *Three hours*

An introduction to Art outlining basic approaches, principles, techniques and media as well as styles of expression, both past and present.

Art 201-202. Art Fundamentals. *Three hours each*
A study of the visual elements of form and the principles of organization through their application to two and three dimensional design problems. Art 201 is a prerequisite to Art 202.

Art 241. Recreational Arts and Crafts. *Three hours*
The development of skills in arts and crafts with particular attention to recreational applications.

Art 271. Elementary School Art. *Three hours*
A studio course involving many kinds of art projects in many media, suitable and practicable for elementary grades.

Art 341-342. Drawing and Painting. *Three hours each*
A studio course working in various painting and drawing media, with major emphasis on oil media. Some work in three-dimensions. Emphasis on the creative approach. Prerequisite: Art 201, 202.

Art 373. Art History: Ancient through Renaissance. *Three hours*
A survey of the development of western art from prehistoric times through the period of the High Renaissance.

Art 374. Art History: Modern. *Three hours*
A survey of the development of western art from the end of the High Renaissance to the present.

Art 441. Advanced Studio. *Three hours*
Studio work in the various painting, drawing, and three-dimensional media. Emphasis on the creative approach. Prerequisites: Art 201, 202, 341, 342. May be repeated once for credit.

Art 495. Independent Study in Art. *Three hours*
Independent study or research on an approved topic, or guided independent studio work beyond the 441 level. May be repeated for credit.

DRAMA AND SPEECH

Requirements for a Major in Drama and Speech: Thirty-six semester hours, including Drama 251, 352, 331, 332, 365, 366, 451, Speech 131 and 231, two courses in dramatic literature selected from approved offerings in either the Drama or English areas, and three hours of practical experience (Drama 151).

Requirements for a Minor in Drama and Speech: Twenty-one semester hours, including Drama 251, 331 or 332, 365, 366.

Drama 131. Introduction to the Theatre. *Three hours*
Basic principles underlying the origin and development of theatrical presentation. Brief study of elements of production.

Drama 151. Theatre Practicum. *One hour*
Actual practical experience in major college theatrical productions in the areas of acting, directing, and production work. May be repeated three times for credit.

Drama 251. Fundamentals of Acting. *Three hours*
Theory and practice behind analysis and presentation of a role.

Drama 321. European Drama since 1945. *Three hours*
A study of representative plays in translation by modern writers from Germany, France, Italy, and Poland. Offered alternate years.

Drama 331. Play Production. *Three hours*
Study and practice in theatrical costuming and make-up. Prerequisite: Drama 131 or permission of instructor. Offered alternate years.

Drama 332. Play Production. *Three hours*
Study and practice in theatrical design and stage lighting. Prerequiste: Drama 131 or permission of instructor. Offered alternate years.

Drama 352. Advanced Acting. *Three hours*
Scene study and period styles of acting. Prerequisite: Drama 251 or permission of instructor. Offered Alternate years.

Drama 365. History of the Theatre. *Three hours*
Study of theatrical presentation from the Golden Age of Greece to Ibsen. Prerequisite: Junior or senior standing or permission. Offered alternate years.

Drama 366. History of Modern Theatre. *Three hours*
Study of theatrical presentation from Ibsen to present. Prerequisite: Junior or senior standing or permission. Offered alternate years.

Drama 451. Directing. *Three hours*
Study and analysis of scripts for production and of production techniques. Staging of one-act play required. Prerequisite: Permission of instructor.

Drama 495. Independent Study in Drama. *Three hours*
Independent study or research on an approved topic. May be repeated for credit.

Speech 131. Fundamentals of Speech. *Three hours*
Study and practice in the basic elements of speech applicable in daily life, such as voice, articulation, pronunciation, bodily activity, speech organization, outlining and research.

Speech 231. Interpretative Reading. *Three hours*
Analysis and oral interpretation of the various forms of literature. Special emphasis on developing qualities for interpretation of character, emotion, and artistic impersonation.

SCHOOL OF MUSIC

The School of Music functions within the total academic structure of Union College and participates in the granting of the following degrees: Bachelor of Music (Applied Music or Music Education Major), Bachelor of Arts (major in music), and Bachelor of Science (major in music).

The purposes of the School of Music are: To offer intensive professional training to the music major and to provide the general college student with the opportunity to become acquainted with music as one aspect of a liberal culture, either as appreciative listeners or as trained participants; to prepare students for graduate study, as church organists and choirmasters, as private teachers of music, and as teachers of music for the public schools.

Admission. The requirements for admission to the School of Music are the same as for admission to the College.

Regulations. All academic regulations and other requirements and specifications of the Union College catalog will apply unless specific mention is made in the School of Music section of the catalog.

No Special Music Fees. No special fees exist for private lessons in music. Students majoring in other fields of study may avail themselves of class lessons in piano, voice, wind, and stringed instruments. Upon sufficient advancement, these students also may receive private instruction without any special fee being charged.

Advanced Placement and Curriculum Acceleration. The School of Music recognizes that its students come with widely varying backgrounds and abilities. In the case of the student with a superior pre-college background in music, advanced placement by examination is possible. In addition, it is also possible for the outstanding student to accelerate his progress through the curriculum by opting for independent study. This process, however, places the responsibility for meeting curricular requirements squarely on the student. In the case of curriculum acceleration, a minimum of three years is required, principally to assure sufficient grounding in the applied music area. Permission of the Director of the School of Music and the student's major professor is required.

Final Examinations For Graduation. These Examinations, written and/or oral, shall be administered when the student and his advisor make such request of the School of Music. These shall be not earlier than three months nor later than two weeks prior to the completion of all work toward the degree.

Preparatory Department. Preparatory work in piano, wind, voice, and stringed instruments is offered in the form of class or private lessons for pre-college students. There is a fee charged for these lessons. A similar arrangement is available for special students of college age and above who are not enrolled as full-time students in the regular curriculum.

Teacher Certifications. The degree program in Music Education, leading to the Bachelor of Music, fulfills the Kentucky requirements for teacher certification. Kentucky teacher certification is reciprocal with many other states.

Piano Proficiency. All music majors must pass a proficiency examination in piano prior to graduation.

Ensemble Requirement. All majors are required to participate a minimum of seven semesters in one ensemble and a minimum of four semesters in another ensemble area.

Program Attendance. All applied students are required to attend all Monday afternoon recitals.

Majors. All majors are required to attend three-fourths* of the total number of programs. A year's work in the applied field is not complete until the recital requirements are fulfilled.

Minors. All minors are required to attend one-half* of the total number of programs.

Others registered for applied music. Others registered for applied music must attend one-third of the total number of programs.

Music 321, 322, and Music 121-3. Recital attendance for students in Music 321 and 322, as well as Music 121, 122, and 123 is at the discretion of the teaching staff.

Student Recitals. Student recitals will be held the third Monday of each month at 4:00 p.m. With the exception of first semester students, all applied students must perform a minimum of one time each semester.

Each student majoring in music presents a junior recital of at least thirty minutes performing time and a senior recital of at least forty-five minutes performing time.

Continuing Examinations. Examinations in seminar classes and tutorial instruction shall proceed at the request of the student and his faculty advisor, and will not necessarily occur in conjunction with the regularly scheduled examination periods of Union College. These examinations, administered by the student's advisory committee, shall be both written and oral, and when the student demonstrates mastery of a particular area of knowledge, he shall be permitted to proceed immediately to the next area.

Recital Examinations. Junior and Senior recital examination shall be given no later than two weeks prior to the recital.

Music Library. The music library, located in the Fine Arts Building, contains records, scores, and listening facilities.

Minor in Music. Twenty-one semester hours, including: Music 161, 162; three semester hours selected from either Music 321 or 322; two semester hours of music electives; two years of ensemble; and completion of the 202 level of course numbering in one field of applied Music.

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*The total number of programs is made up of all School of Music programs, Artist Series programs, and Southeastern Kentucky Concert Series programs on campus. Recital attendance credit may also be obtained by attending Southeastern Kentucky Concert Series programs held off campus. Check the Dept. of Music bulletin board for the total number of programs for the current semester.

Music Major, B.A. and B.S.

Please see general requirements.

Academic Emphasis	Sem. Hrs.
Foundations of Music	8
Harmony and Ear Training	8
Form and Analysis	4
Music History	12
Applied Music	8
Ensemble	0
	40

Applied Emphasis	Sem. Hrs.
Foundations of Music	8
Harmony	6
Form and Analysis	4
Music History	6
Applied Music	16
Ensemble	0
	40

Bachelor of Science

Combination Music and Business Major

Special curricula combining the study of music with preparation in business may be designed to fit the needs of the individual student.

Bachelor of Music Degrees

Music Requirements. These requirements apply to the BM (Applied Music).

Academic	Sem. Hrs.
Foundations of Music	8
Harmony and Ear Training	8
Form & Analysis	4
Counterpoint	4
Music History	6
Applied Field Literature	4
	34

Applied	Sem. Hrs.
Major Applied Study	24
Recitals	2
Piano Secondary*	4
Stringed Instruments Class*	2
Wind Instruments Class*	2
Voice Class*	1
Pedagogy	1
Ensemble	0
	36

Bachelor of Music Degrees

General Requirements. These apply to the BM (Applied Music).

	Sem. Hrs.
Humanities	12
English 111-112	6
Foreign Language	12
Science	4
Social Science	9
Electives	15
	58

Music Requirements. These apply to the BM (Music Education).

Academic	Sem. Hrs.	Applied	Sem. Hrs.
Foundations of Music	8	Major Applied Study	16
Harmony and Ear Training	8	Recital	0
Form & Analysis	4	Piano Secondary*	4
Music History	6	Stringed Instruments Class*	2
Conducting	4	Wind Instruments Class*	2
Secondary School Music	3	Voice Class*	1
Music Arranging	2	Ensemble	0
	35		25

General Requirements. This includes both the regular college requirements and the education Certification Requirements for the music education major. Music majors may use 9 hours of music to help fulfill humanities requirements.

APPLIED MUSIC

The study of music through the development of performance skills is the central core in the training and growth of the musician. Instruction is offered in the following instruments: piano, organ, voice, woodwinds, brass, strings, and percussion. The following goals are common to all applied music study:

developing in the student a high level of technical proficiency;
acquainting him with the learning processes involved in that development;
familiarizing him with a body of musical literature appropriate to his instrument;
assisting him in mastering a representative sample of that repertory.

Complete outlines of the levels of technical proficiency and repertory expected at the end of each semester of study are given to the student at the beginning of the semester. These are organized in an eight semester sequence designed to insure that the student completing the sequence has achieved a level of mastery appropriate to a baccalaureate music degree. Similar outlines exist for students enrolling for applied music degree. Similar outlines exist for students enrolling for applied music study at the minor or elective level. The content of these applied music course outlines is for the guidance of the student and the teacher, and is therefore a flexible rather than a rigid description of the requirements. Copies of these outlines may be requested from the Head of the Department of Fine Arts.

SECONDARY LEVEL

These courses are designed for general college students enrolling for applied music study as an elective, and for use as a secondary applied field for music majors and minors.

Music 101-102. Applied Music. *One or two hours*
Freshman level secondary applied music study.

Music 201-202. Applied Music. *One or two hours*
Sophomore level secondary applied music study.

Music 301-302. Applied Music. *One or two hours*
Junior level secondary applied music study.

*Certain of these may be waived or passed by examination if the skill involved coincides with the student's Major Applied study area. In this case the equivalent number of ensemble hours may be applied toward the total needed for graduation.

Music 401-402. Applied Music. *One or two hours*
Senior level secondary applied music study.

MAJOR LEVEL

These courses are designed for music majors enrolled in the Bachelor of Music Curriculum and for students seeking a Bachelor of Arts or a Bachelor of Science degree with a music major or minor.

Music 111-112. Applied Music. *Two or three hours*
Freshman major or minor level applied music study.

Music 211-212. Applied Music. *Two or three hours*
Sophomore major or minor level applied music study.

Music 311-312. Applied Music. *Two or three hours*
Junior major level applied music study.

Music 317. Junior Recital. *Zero or one hour*

Music 411-412. Applied Music *Two or three hours*
Senior major level applied music study.

Music 415-416. Applied Field Literature. *Two hours*
A study of the literature available for the student's major instrument, and related instruments where appropriate, with attention to stylistic characteristics and ornamentation.

Music 417. Senior Recital. *Zero or one hour*

Music 418-419. Sight Reading and Accompanying. *One hour*
Proficiency in reading the various clefs, vocal scores, and accompaniments, with emphasis on the techniques of sensitive accompanying. Keyboard majors and selected minors only.

HISTORY AND APPRECIATION

Music 121. Introduction to Music. *Three hours*
A study of musical materials and styles for the liberal arts student with a limited musical knowledge. Not open to music majors or music minors.

Music 122. Introduction to the History of American Popular Music. *Three hours*
A historical approach involving the study of styles and personalities beginning with the origins of jazz and ending with the current trends and concepts of today. Open to all students.

Music 123. Introduction to the History of Church Music. *Three hours*
The history and function of Western Church music from ancient Judaism through contemporary usage. Open to all students.

Music 321-322. Music History. *Three hours*
A study of representative music both written and recorded, and readings, coordinating and integrating music skills. Prerequisite: Music 162 or permission of the instructor.
(321) Antiquity through 1750.
(322) Classic period to the present.

Music 421-422. Music History Seminar. *Three hours*
Intensive study of a selected period or genre. Major paper required. Offered upon sufficient demand. Prerequisite: Music 321-322.

ENSEMBLES

Music 151. Chorus *Zero or one hour*
Open to all college students; performs major choral works in concerts. One rehearsal per week. May be repeated for credit.

Music 152. Choir *Zero or one hour*
Open by audition only; performs in chapel, Christmas concert, yearly tour, spring concert, graduation. Limited to forty-nine students; four rehearsals per week. May be repeated for credit.

Music 153. Stage Band. *Zero or one hour*
Open by audition only. A jazz oriented ensemble of appropriate instrumentation limited to twenty students. Two rehearsals per week. May be repeated for credit.

Music 154. Wind Ensemble. *Zero or one hour*
Open to all those interested in band music. Two rehearsals per week. May be repeated for credit.

Music 155. Brass Chamber Ensemble. *Zero or one hour*
Open by audition only. Size and make-up will vary with the needs and interests of the students enrolled. One rehearsal per week. May be repeated for credit.

Music 156. Collegium Musicum. *Zero or one hour*
Open to interested students. A performance group intended to give the student acquaintance with less frequently performed literature. One rehearsal per week. May be repeated for credit.

Music 157. Woodwind Chamber Ensemble. *Zero or one hour*
Open by audition only. Size and make-up will vary with the needs and interests of the students enrolled. One rehearsal per week. May be repeated for credit.

Music 158. String Chamber Ensemble. *Zero or one hour*
Open by audition only. Size and make-up will vary with the needs and interests of the students enrolled. One rehearsal per week. May be repeated for credit.

Music 159. Percussion Ensemble. *Zero or one hour*
Open by audition only. Size and make-up will vary with the needs and interests of the students enrolled. One rehearsal per week. May be repeated for credit.

Music 357. Opera Workshop. *Zero or one hour*
Experience in the standard and contemporary opera repertoire; preparation and presentation of complete operas and programs of excerpts, with costumes and scenery. Admission by audition only. May be repeated for credit. Offered upon sufficient demand.

THEORY

Music 161-162. Foundations of Music. *Four hours*
A combined course in the areas of music theory, history, and literature. Five periods per week.

Music 261-262. Harmony. *Three hours*
Continuation of Music 161-162 in the area of part-writing and analysis. Advanced chromatic harmony of the middle Romantic period. Keyboard harmony included. Three periods per week. **Prerequisite:** Music 162.

Music 263-264. Ear Training. *One hour*
Sight singing, ear training, and dictation to be taken concurrently withMusic 261-262. Two periods per week. **Prerequisite:** Music 162.

Music 361-362. Form and Analysis. *Two hours*
The development of musical forms from small units to large. Study of large scale analytic techniques including those necessary for late 19th and early 20th Century Music. **Prerequisite:** Music 262.

Music 365. Music Arranging. *Two hours*
Basic techniques of orchestration and arranging. **Prerequisite:** Music 262.

Music 461-462. Counterpoint. *Two hours*
The vocal counterpoint of Palestrina and the instrumental counterpoint of Bach. **Prerequisite:** Music 162. Offered upon sufficient demand.

Music 465. Theory Seminar. *Three hours*
An advanced course in music theory, including a study of contemporary practices. **Prerequisite:** Music 362, and permission of the instructor. Offered upon sufficient demand.

MUSIC EDUCATION

Music 171-172. String Instruments Class. *One hour*
Class instruction in string instruments.

Music 173-174. Piano Class. *One hour*
Class instruction in piano.

Music 175-176. Wind and Percussion Instruments Class. *One hour*
Class instruction in woodwind, brass, and percussion instruments.

Music 177-178. Voice Class. *One hour*
Class study for students who are not prepared to study at the level of private applied voice.

Music 373. Elementary School Music. *Three hours*
Methods and materials in the elementary school. Will include functional ability at the piano keyboard, the fundamentals of music, and library research.

Music 374. Secondary School Music. *Three hours*
Methods and materials for junior and senior high school. Will include research projects. **Prerequisite:** Junior standing in the School of Music or permission of the instructor.

Music 473-474. Conducting. *Two hours*
Basic techniques of the art of conducting; score reading, both vocal and instrumental; rehearsal techniques; balance and interpretation; organization; survey and study of literature; practical work with ensembles.

Music 475. Pedagogy. *One hour*
Techniques and principles of private and class instruction with examination of carefully considered and recommended materials.

INDEPENDENT STUDY

Music 495. Independent Study. *Two or three hours*
Independent study and/or research on an approved topic. **Prerequisite:** Permission of the student's major professor. May be repeated for credit.

2. DEPARTMENT OF LANGUAGES

W. Gordon Marigold, *Department Head*
English—French—German

ENGLISH

Requirements for a Minor: A minimum of twenty-four semester hours including 111, 112. This must include six hours of English literature survey; American literature survey 341; three hours of Shakespeare: 371 or 372; and one genre course from 351, 352, and 451G.

Requirements for a Major: A minimum of thirty semester hours in addition to English 110, 111, 112, including the requirements noted for Minors; 401G or 421G; one further advanced course, preferably a seminar course at the 400 level, determined by consultation. English majors are also advised to take at least six hours of a foreign language.

Requirements for an Area: Forty-eight hours, thirty of which shall satisfy the requirements for a major, and including an advanced writing course; one additional period course selected from 321, 322, 331 and 332; and courses in speech or drama.

Students preparing to teach high school English are required to take Education 362 and should elect the English major. English minors who expect Department recommendation for teacher training should consult the department Head about their individual needs for advanced courses.

A general prerequisite for 200 level courses is the successful completion of English 111, 112. Students are urged to take English 221, 222 before entering more advanced courses. Students who have not taken English 221, 222 are urged to consult with members of the Department before enrolling for advanced work.

English 110. Elementary Freshman Composition. *Three hours*
A course in basic writing skills of progressing complexity beginning with the sentence and ending with the theme. Must be followed by English 111.

English 111. Freshman Composition. *Three hours*
Writing of descriptive, expository, and argumentative themes and documented papers. Study of the essay as a model and for discussion. Must precede English 112.

English 112. Freshman Composition. *Three hours*
Literary models and a brief introduction to literary forms provide the basis for longer themes emphasizing critical writing and documentation.

English 221-222. Survey of English Literature. *Three hours each*
From *Beowulf* into the 20th century. The first half includes the Middle Ages and Renaissance and the second starts with the Neo-classical and continues through the Romantic and Victorian periods. Either course may be taken separately and not necessarily in sequence.

English 321. Sixteenth and Seventeenth Century Literature. *Three hours*
A study of non-dramatic poetry and prose beginning in the early Renaissance (with emphasis on such figures as Sidney and Spenser), continuing through the metaphysical poets and the Cavalier poets, and culminating in Milton. Offered in alternate years.

English 322. Restoration and Eighteenth Century Literature. *Three hours*
Prose and poetry of the neo-classical age, beginning with Dryden and his contemporaries and extending through Samuel Johnson. Offered in alternate years.

English 331. English Romantic Period. *Three hours*
The prose and poetry of the first third of the 19th century, emphasizing the work of Wordsworth, Coleridge, Byron, Shelley, and Keats. Offered in alternate years.

English 332. Victorian Period. *Three hours*
Major poets and prose writers, emphasizing the contributions of such masters as Tennyson, Browning, and Arnold. Offered in alternate years.

English 341-342. Survey of American Literature. *Three hours each*
The first half extends from the colonial writers through Whitman and the second from Dickinson to the mid-20th century. Either course may be taken separately and not necessarily in sequence.

English 351. The English Novel. *Three hours*
The historical study of the growth of the novel as a form, with selected examples from Defoe through Hardy. Offered in alternate years.

English 352. The American Novel. *Three hours*
From the "American Renaissance" of the 19th century through the rise of realism to Faulkner and more recent developments. Offered in alternate years.

English 355. Survey of Children's Literature. *Three hours*
Designed to familiarize the student with books and other library materials suitable for supplementing the curriculum and encouraging recreational reading in the elementary school. (Cannot be used toward humanities general requirement, major, minor, or area in English.)

English 371-372. Shakespeare. *Three hours each*
An intensive and critical study of selected plays, focusing on their timeless human, literary, and dramatic qualities. Each course may be taken separately and not necessarily in sequence.

A general prerequisite for 400 level courses is Junior standing.

English 401G. Modern Grammar. *Three hours*
A survey of modern approaches to the study of language beginning with the structuralist view of linguistic analysis through the theories of generative grammar to the most recent

developments in generative semantics. Considerable attention will be paid to the possibilities of practical applications of linguistic theory. Required for teachers.

English 402G. Advanced Composition. *Three hours*
For the student who wishes to become a more competent writer. Research papers, factual narratives, argumentation, and "creative" writing are assigned according to the needs and aptitude of the student. Offered in alternate years.

English 421G. History of the English Language. *Three hours*
A study of the origins and development of the English language from Anglo-Saxon times to the present. Supplementary readings in early and medieval English history with emphasis on the effects of historical events on language change. Required for teachers and graduate students.

English 451G. Modern Poetry. *Three hours*
American and British poetry, with consideration of ways of reading, criticizing, and writing verse in this century. Offered in alternate years.

English 490G. Composition for Teachers of English. *Three hours*
Designed to train teachers of secondary school English composition and to indirectly improve the writing of their students. The instructor will utilize the contributions of his colleagues. Required for certification to teach secondary English.

English 495. Independent Study. *Three hours*
Intensive individual work, under supervision, in some phase of English, American, or world literature, linguistics, or composition not otherwise covered in the curriculum. Prerequisites: Twenty-four hours of English above English 111, 112, and permission of the head of the department. May be repeated for credit.

English 521. Advanced Study of English Literature, 500-1700. *Three to nine hours*
Intensive study of some phase of English literature within this period. This course may be taken more than once providing that the course content is different. The class schedule will designate the specific content covered.

English 522. Advanced Study of English Literature, 1700-Present. *Three to nine hours*
Intensive study of some phase of English literature within this period. This course may be taken more than once providing that the course content is different. The class schedule will designate the specific content covered.

English 541. Advanced Study of American Literature, 1600-1860. *Three to nine hours*
Intensive study of some phase of American literature within this period. This course may be taken more than once providing that the course content is different. The class schedule will designate the specific content covered.

English 542. Advanced Study of American Literature, 1860-Present. *Three to nine hours*
Intensive study of some phase of American literature within this period. This course may be taken more than once providing that the course content is different. The class schedule will designate the specific content covered.

English 552. Advanced Study in Linguistics. *Three to nine hours*
Intensive study of some phase of linguistics depending on the needs and interests of the student. This course may be taken more than once providing that the course content is different. The class schedule will designate the specific content covered.

English 595. Independent Study in English. *Three hours*
Independent study or research on an approved topic. May be repeated for credit.

FRENCH

The program offers the opportunity to gain some understanding of France and its culture as well as a basic knowledge of the French language. Students offering more than one entrance unit in French and students transferring from other colleges should consult with the Head of the Department of Languages before registering for any course in French.

French 111-112. Elementary French *Three hours each*
Basic French grammar; practice in the oral and written language.

French 211-212. Intermediate French. *Three hours each*
More detailed study of grammatical structure; study of important literary works; individual collateral reading. Prerequisite: French 111-112 or equivalent.

French 331. French Civilization. *Three hours*
The economic, social, and cultural development of France; French contributions to world civilization. May not count toward fulfillment of the language requirement.
No knowledge of French required. Offered on sufficient demand.

French 495. Independent Study. *Three hours*

GERMAN

The program offers the opportunity to gain some understanding of Germany and its culture as well as a basic knowledge of the German language. Students offering more than one entrance unit in German and students transferring from other colleges should consult with the Head of the Department of Languages before registering for any course in German.

German 111-112. Elementary German. *Three hours each*
Basic German grammar; simple reading; practice in the oral and written language.

German 211-212. Intermediate German. *Three hours each*
More detailed study of grammatical structure; reading of important literary works; individual collateral reading. Prerequisite: German 111-112 or equivalent.

German 331. German Civilization. *Three hours*
The economic, social, and cultural development of Germany; German contributions to world civilization. May not count as part of the language requirement. No knowledge of German required. Offered on sufficient demand.

German 495. Independent study. *Three hours*

3. DEPARTMENT OF RELIGION AND PHILOSOPHY

Robert D. Matthews, *Department Head*

Courses in this Department are designed to acquaint the student with the Judaeo-Christian tradition and the other great religious traditions of mankind and with the great traditions and disciplines of human thought; to deepen his awareness of himself and of the human community; to cultivate his powers of critical examination and the meaning and direction of human existence.

Studies in religion are especially recommended for students of art, history, and literature, and for students preparing for Christian vocations.

Studies in philosophy are especially recommended for pre-professional training for such vocations as the Christian ministry, college teaching, law, journalism, creative writing, and art, as well as for students of history, literature, and the sciences.

Pre-ministerial Preparation. The American Association of Theological Schools has stated that the college work of students planning to enter the ministry should result in at least the following: 1. Ability to speak and write English clearly and correctly, to think clearly, and to read at least one foreign language; 2. Acquaintance with the world of men and ideas, the world of nature, and the world of human affairs; and 3. A sense of achievement through the mastery of fields of study and through honors work or other independent study. The student is expected to become well grounded in English, philosophy, and history, and to gain some background in social studies (especially psychology and sociology), the natural sciences, languages, and religion.

RELIGION

Requirements for a Major. The twenty-four hour major, recommended for pre-ministerial students, must include courses 111, 112 and 490, plus Philosophy 491. The thirty hour major may include Philosophy 371.

Requirements for a Minor. Twenty-one semester hours, at least nine of which must be in courses numbered above 300.

Religion 101. Conference Studies. *No credit*
A study of the books required by the Methodist Church for the local preacher's license. Required of all recipients of ministerial loan-grants who have not yet obtained the license to preach.

Religion 111. Old Testament History, Literature, and Interpretation. *Three hours*
The history of Israel from the earliest times to the Maccabean Age. Historical and literary criticism and religious significance of the emergence of Judaism.

Religion 112. New Testament History, Literature, and Interpretation. *Three hours*
Attention to author, date, origin, historical and religious significance. Religion 111 recommended.

Religion 121. Primitive Religions. *Three hours*
Survey of the origins and characteristics of rites, legends, and myths of technologically undeveloped societies.

Religion 127. Archaeology and the Bible. *Three hours*
Exciting archaeological discoveries, especially those related to the Bible, supplemented by wide reading in books, magazines, and newspapers, and class reports, color slides, and movies.

Religion 201-202. Readings in the Greek New Testament. *Six hours*
An inductive approach to koine Greek, recommended especially for the pre-seminary students. Offered alternate years.

Religion 212. The Old Testament Prophets. *Three hours*
The nature of prophecy and the prophetic movement in Israel from its beginning with Moses to its close with the book of Jonah. Religion 111 recommended. Offered alternate years.

Religion 231. The Life and Teachings of Jesus. *Three hours*
The world in which Jesus was born and an interpretation of his messianic consciousness, personality, activities, and teachings. Religion 112 recommended.

Religion 241. Life and Teachings of Paul. *Three hours*
The world of Paul, his life, teachings, and significance, using his letters as the primary source. Religion 112 recommended.

Religion 311. Introduction to Christian Thought. *Three hours*
Examination of traditional and contemporary understanding of the Christian faith, with emphasis on the nature of God and of man; the significance of Christ and the Church; the relation of religion to morality; the meaning of Creation and Redemption; and the interpretation of Human Destiny. *Prerequisite:* 112. Offered alternate years.

Religion 321. Primitive Religions. *Three hours*
Same course as Religion 121, but with more independent research. For upperclassmen.

Religion 327. Archaeology and the Bible. *Three hours*
Same as Religion 127 but with additional reading and reports.

Religion 353. Church History. *Three hours*
The origin and development of the Christian Church from its beginnings through the Reformation.

Religion 355. World Religions. *Three hours*
A descriptive account of the faith and practices of present-day world religions, with emphasis on Hinduism, Buddhism, Confucianism, Islam.

Religion 490. Seminar in Religion. *Three hours*
Intensive study on a special subject, with oral and written reports. Possible topics include The Fourth Gospel, Apocalyptic Literature, Pauline Theology, Wisdom Literature, The

Apostolic Period. *Prerequisite:* Advanced standing and permission of the instructor. Offered alternate years.

Religion 495. Independent Study. *Three hours*
Independent study or research on an approved topic. May be repeated for credit.

PHILOSOPHY

Requirements for a Major: Either a twenty-four or a thirty hour major may be elected. Religion courses 311 and 355 may in some cases be included.

Requirements for a Minor: Twenty-one semester hours.

Philosophy 191. Introduction to Philosophy. *Three hours*
Both a study of the nature of philosophy, its aims, problems, and methods, and an exercise in philosophizing in which the student clarifies constructively and evaluates critically his own and other understandings of life.

Philosophy 202. Logic. *Three hours*
Cultivation of rational acuity through an examination of the procedures and limits of rational discourse.

Philosophy 291. Philosophy of Religion. *Three hours*
An introduction to basic modern concepts, issues, and methods in the philosophical examination of religion.

Philosophy 302. Aesthetics. *Three hours*
Exploration and cultivation of the sense of beauty through an examination of the nature of artistic production and of the grounds of aesthetic criticism and judgment, including a survey of aesthetic theory. Alternate years.

Philosophy 371. Ethics. *Three hours*
Cultivation of moral awareness through an examination of human activity, individual and social, with particular reference to the grounds of ethical decision and evaluation. The major theories are examined and related to concrete personal and social problems.

Philosophy 391. History of Western Philosophy I: Ancient and Medieval. *Three hours*
Philosophical thinking in its cultural context, from its birth through the classical and medieval eras.

Philosophy 392. History of Western Philosophy II: Modern. *Three hours*
The rise and development of modern culture and its thought-forms, through the nineteenth century.

Philosophy 431. Contemporary Philosophy. *Three hours*
Twentieth century western thinking and its nineteenth century backgrounds, with particular reference to pragmatism, phenomenology, existentialism, the analytical movement and dialectical materialism. *Prerequisite:* Philosophy 191.

Philosophy 451. Political Theory and Philosophy. *Three hours*
The nature, scope, methods, development and interrelationships of political and philosophical thought. Analysis of traditional and contemporary theories.

Philosophy 490. Seminar in Philosophy. *Three hours*
Intensive study of a special topic such as Epistemology, Metaphysics, Plato, Kant. Permission of instructor required.

Philosophy 495. Independent Study. *Three hours*
Independent study or research on an approved topic. May be repeated for credit.

"I believe the educational process only begins with the presentation of factual knowledge in the classroom. It is fully developed by our day to day interactions as individuals."

Dale K. Myers,
Chairman of the Division of Natural Sciences

Division of Natural Sciences

Dale K. Myers, *Chairman*
Wendell B. Kringen, *Assistant Chairman*
Biology — Chemistry — Environmental Education
General Science — Mathematics — Physics

PRE-PROFESSIONAL PROGRAMS

Since professional schools vary considerably in their admission requirements, the student is advised to select the professional school he wishes to attend later, and then choose pre-professional courses accordingly. The science faculty should be consulted before registration in order to assist the student in preparing a course schedule. For details of a specific program, the following faculty members should be consulted.

Dentistry–Dr. Jankovics, Chemistry
Engineering–Dr. Santaram, Physics
Medical Technology–Dr. Kringen, Biology
Medicine–Dr. Myers, Chemistry
Optometry–Dr. Burns, Physics
Pharmacy–Dr. Myers, Chemistry
Veterinary Medicine–Mr. Carter, Physical Science
Radiologic Technology–Dr. Burns, Physics

COMBINED DEGREE IN ENGINEERING

A cooperative "Three-Two Plan" has been worked out with the University of Kentucky in which the student attends Union College for three years pursuing certain pre-engineering courses in addition to a solid program in liberal arts. At the end of the three years upon the recommendation of Union College, he enters the cooperating university as a junior and in two additional years completes all the requirements for the B.S. degree in Engineering. Both the B.A. or B.S. from Union College and B.S. In Engineering from the cooperating university are awarded at the end of the fifth year.

MEDICAL TECHNOLOGY

Union College offers a pre-professional education program for medical technologists composed of academic subjects acceptable to the Board of Schools of Medical Technology (A.S.C.P.) and approved by the Council on Education of the American Medical Association. Upon acceptance and satisfactory completion of the professional year at an accredited medical technology school, the student's credits will be accepted at Union College and the baccalaureate degree awarded.

MEDICINE

The Bachelor of Arts degree will be granted to students who have completed three years of work at Union College and one year of work at any accredited medical school with the provisions stated in the section on Combined Degrees.

RADIOLOGIC TECHNOLOGY

A joint program in Radiologic Technology has been developed between Union College and Pineville Community Hospital. The program consists of 21 months of course work in math, science, and liberal arts at Union College and clinical work and professional courses in radiologic technology at Pineville Hospital. Upon completion of this part of the program, students will receive the A.A. degree in Radiologic Technology, and begin a six-month internship at Pineville Hospital. At the completion of the internship period, the students are eligible to write the National Registry Examination for certification as Registered Radiologic Technologists.

This program is open to a limited number of students. Applicants to the program must have two units of high school science and two units of high school math. An interview with the faculty in radiology may be required for admission to the program.

ENVIRONMENTAL STUDIES PROGRAM

Since 1970 Union College has conducted a variety of environmental studies programs for students and regional community leaders. Some of these activities have been based on the main Barbourville campus. Most, however, have been operated from the Union College Environmental Education Center in the Cumberland Gap National Historical Park. This special 100 acre campus, located near the town of Middlesboro and about 35 miles south of Barbourville, includes classroom facilities, dormitories, a dining hall, a gymnasium, conference rooms, a library, and a laboratory. The 20,000 acres of the surrounding national park provide excellent opportunity for environmental field study.

The entire environmental studies program is being revised for incorporation into a more comprehensive Appalachian Regional Studies Program. Components of this developing program include an undergraduate Area of Concentration in Environmental Studies, an Environmental Modeling Project, and the Appalachian Environmental Summer Semester.

Although the new comprehensive, interdisciplinary regional studies program will not be fully operational until the 1976 academic year, an intensive five-week summer program in environmental studies will be offered at the Union College Environmental Education Center in June-July, 1975. This six semester hour program will emphasize field studies and take an interdisciplinary approach to environmental issues of special concern to the Appalachian Region. Inquiries about this special program should be sent to the Chairman, Division of Natural Sciences, Union College, Barbourville, Kentucky 40906.

BIOLOGY

Requirements for a Major: Thirty semester hours in biology of which twenty-four hours must be chosen from the following: 121, 231, 232, 233, 234, 241, 331, 332, 351, and 361, twelve semester hours in chemistry, eight semester hours in physics, and seven semester hours in mathematics or statistics.

Requirements for a Minor: Twenty-one semester hours in biology.

Biology 121. Introduction to Biology. *Four hours*
An introduction to the structure and function of living systems with emphasis on basic mechanisms and concepts. Intended primarily for majors, minors, and those desiring an intensive introduction to biology.

Biology 191. Medical Terminology. *Two hours*
The study of the specialized terminology of biology and medicine. On demand.

Biology 231. Animal Biology. *Four hours*
A study of the morphology, physiology, ecology, and evolution of the organisms in the animal kingdom. *Prerequisite:* Biology 121.

Biology 232. Plant Biology. *Four hours*
Using the modular approach, the course acquaints the student with the various fields of study in botany. Topics covered include seed development, taxonomy, structure and function, behavior, photosynthesis, respiration, and genetics. *Prerequisite:* Biology 121. Alternate years.

Biology 233. Survey of the Plant Kingdom. *Four hours*
An investigation of the diverse forms of plant life from the bacteria to the flowering plants. Emphasis is on life histories, evolutionary relationships, and diagnostic characteristics. *Prerequisite:* Biology 121. Alternate years.

Biology 234. Microbiology. *Four hours*
The morphology, physiology, and taxonomy of bacterial and other microorganisms, including brief treatment of algae, protozoa, molds, rickettsiae, viruses, and yeasts. Their roles in industry; the soil, sewage, water, and air; foods; and disease are considered. Cultivation and observation techniques in laboratory. Alternate years.

Biology 241. Fundamentals of Ecology. *Four hours*
An introduction to ecological studies. The course will acquaint students with the basic interrelationships between organisms and their nonliving environment. Both field and laboratory projects will be undertaken. *Prerequisite:* Biology 121 or General Science 111. Alternate years.

Biology 321, 322, 323. Field Biology. *Four hours each*
A series of courses offered during the summer at the MACCI Biological Field Station on Norris Lake near LaFollette, Tennessee. The courses will vary from year to year. Limnology is usually offered yearly; other possibilities are entomology, forest ecology, and plant taxonomy. *Prerequisite:* Biology 121.

Biology 331. Animal Physiology. *Four hours*
A study of the functions of the organ systems of animals. *Prerequisite:* Biology 231 and Chemistry 112. Alternate years.

Biology 332. Cell Biology. *Four hours*
A study of structure and function at the subcellular level. Emphasis will be on energy flow, and on synthesis of DNA, RNA, and protein. *Prerequisite:* At least one of three courses—231, 232, or 234—and Chemistry 112. Alternate years.

Biology 351. Comparative Vertebrate Anatomy. *Four hours*
A detailed study of the structure of higher vertebrates with special reference to the form and development of systems and organs. *Prerequisite:* Biology 231. Alternate years.

Biology 361. Genetics. *Four hours*
Fundamental principles of heredity in plants, animals, and microorganisms. *Prerequisite:* Biology 332 and Chemistry 112.

Biology 431. Developmental Biology. *Four hours*
A review of the process of germ cell development, fertilization, and cleavage in both invertebrates and vertebrates, followed by a detailed comparative study of the development of the frog, chick, pig, and man. Living material of the frog and chick, and whole mounts and serial sections of frog, chick, and pig are used for study of germ layer formation, histogenesis, and organogenesis. *Prerequisite:* Biology 231 and Biology 332. On demand.

Biology 495. Special Problems. *Four hours*
An introduction to the methods of scientific research for the advanced student who has demonstrated ability to do independent work in biology. It will consist of a particular problem chosen after consultation with the instructor. A typewritten and bound report may be required. An examination may or may not be given, depending on the nature of the problem. *Prerequisite:* Consent of the instructor.

Biology 595. Research-Investigations. *Four hours*
An independent research problem in which the student must demonstrate his ability to employ the scientific method in carrying out an original scientific investigation. A typewritten and bound manuscript will be required. An examination may or may not be given, depending on the nature of the problem selected. *Prerequisite:* Permission of the instructor and approval of the head of the department.

CHEMISTRY

Requirements for a Major: A student must take the following courses: Chemistry 111-112, 212, 214, 311-312, 412. The major is required to take Physics 211, 212, 311 and Mathematics 241-242.

For those desiring to concentrate more heavily in the field of chemistry in order to meet requirements of graduate schools and standards set by the American Chemical Society, it is suggested the major be expanded to include some of the following: Chemistry 402, 431, 495. Those embarking on this course should obtain approval of the Head of the Department at the beginning of the second year.

Requirements for a Minor: Twenty-one semester hours which should include 111-112.

Chemistry 111-112. General Chemistry. *Four hours*
Designed to develop the cultural values of the stated objectives above and to serve as a foundation for later Chemistry courses. Laboratory work designed to support and elaborate classroom discussions. Second semester laboratory includes qualitative inorganic analysis.

Chemistry 212. Quantitative Analysis. *Four hours*
A study of important volumetric and gravimetric analyses presented from a modern theoretical standpoint. Also an introduction to the study of advanced methods of analysis including some newer instrumentation techniques. *Prerequisite:* Chemistry 112.

Chemistry 214. Topics in Chemistry—Bonding, Equilibrium, Thermodynamics. *Four hours*
A more detailed study of bonding, equilibrium, and thermodynamics for the chemistry major or other pre-professional student. *Prerequisite:* Chemistry 112.

Chemistry 302. Instrumental Analysis. *Four hours*
An introduction to the study of instrumental analysis. Applied theory and laboratory experiments on the various types of spectrophotometry, electrochemical methods, radioisotope techniques, and some of the more advanced instrumentation such as electron microscopy, mass spectroscopy, X-ray diffraction, and magnetic resonance.

Chemistry 311-312. Organic Chemistry. *Four hours each*
A thorough course in the chemistry of organic compounds. Unitized laboratory work designed to illustrate the basic principles of organic chemistry. *Prerequisite:* Chemistry 112.

Chemistry 402. Qualitative Organic Chemistry. *Four hours*
Course presents methods of identification of individual organic compounds and separation and identification of mixtures of complex organic compounds. *Prerequisite:* Chemistry 311. On demand.

Chemistry 412. Physical Chemistry. *Four hours*
A study of theoretical chemistry as applied to the structure of atoms and molecules; relationships between structure and chemical and physical properties; kinetics; radiochemistry. *Prerequisite:* Mathematics 241, Physics 211-212. Alternate years.

Chemistry 431. Biochemistry. *Four hours*
A study of carbohydrates, proteins, lipids, vitamins, hormones, and enzymes as related to plant and animal life. Included is a discussion of RNA,DNA, genetic code system, intermediary metabolism, and integrated metabolism. *Prerequisite:* Chemistry 211-212, 311. On demand.

Chemistry 495. Special Problems. *Four hours*
This is an introduction to the methods of scientific research. The course is designed for the advanced student who has demonstrated ability to do independent work in Chemistry. It will consist of a particular problem decided upon after consultation with the instructor. Upon conclusion of the work a typewritten and bound report-thesis may be required. An examination may or may not be given, depending on the nature of the problem. *Prerequisite:* Permission of the head of the department.

GENERAL SCIENCE

Neither a major nor a minor is offered.

General Science 100. Man and His Environment. *Four hours*
A multidisciplinary discussion of the effects of man's activities in his environment. Specific problems will be identified and their nature explored; field trips will be conducted; independent study projects will be required.

General Science 110. Human Biology. *Four hours*
The study of man from a biological point of view. Emphasis on structure physiology, reproduction, and genetics. Laboratory studies are included. This course does not apply toward a biology major.

General Science 111. Fundamentals of Biology. *Four hours*
The topics of ecology, environmental concerns, evolution, and animal behavior will be emphasized. Laboratory studies are included. This course does not apply toward a biology major.

General Science 112. Physical Science. *Four hours*
An introductory course dealing with the historical development of science as a human endeavor; observations, model building, science as a process, inquiry, great principles in science; man's relationship to earth and his use of technology to solve environmental problems. *Prerequisite:* High school algebra or mathematics 100.

General Science 114. Introduction to Astronomy. *Four hours*
An introduction to the elements of astronomy. Constellation identification, telescope operation, properties of the moon and planets, solar features, stars, galaxies, and cosmology.

General Science 569. Environmental Workshop. *Three hours*
For in-service teachers, this course includes a survey of environmental problems, current trends and techniques in environmental education, field trips and related seminars. To be offered at the Environmental Education Center, Cumberland Gap National Historical Park. Summers only.

General Science 571-572. Aerospace Workshop. *Three hours each*
A workshop for elementary school teachers offered during the summer session. It is conducted by the Graduate School in cooperation with the National Aeronautics and Space Administration. Lectures and demonstrations will be given by NASA Space Scientists and Astronauts. Topics covered in science that can be applied to the new problems of space include: astronomy, physics, chemistry, earth science, biology, applications of information, audio-visual aids, teaching methods and demonstration. Each student is required to develop a teaching unit on space science suitable for use in the grade or subject he teaches.

MATHEMATICS

Requirements for a Major. Thirty semester hours consisting of mathematics courses numbered 241 and above, Physics 211 and 212.

Requirements for a Minor. Twenty-one semester hours consisting of mathematics courses numbered 203 and above.

Mathematics 100. Elements of Mathematics. *Three hours*
Does not fulfill general studies requirements. This course is intended for students with a weak mathematics background. The course includes a review of the real number system and topics selected from the following: sets, logic, graphs, algebraic equations, ratio and percent, probability, exponents and radicals, logarithms, and the definition of trigonometric functions.

Mathematics 111. College Algebra and Trigonometry. *Four hours*
Basic algebraic and trigonometric definitions and operations; elements of set theory; exponents and radicals; linear, quadratic and trigonometric equations; graphs, functions and inverse functions; use of trig and log tables; radian measure; solution of triangles; probability and permutations. *Prerequisite:* High school algebra or equivalent. Does not count toward major or minor.

Mathematics 155. FORTRAN Programming for Science Problems. *One hour*
An introduction to the use of FORTRAN Programming for topics in science and mathematics courses. The course consists of three weeks of classroom instruction in which the fundamentals of FORTRAN programming are covered. Topics include FORTRAN constants and variables, operations, input/output, and control statements. During the remainder of the term, an application of FORTRAN for a science/math course is developed by the individual student.

Mathematics 203-204. Structure of the Number Systems. *Three hours each*
Historical development of the numeration system from an intuitive to a logical approach based upon set theory, definitions of the basic operations on whole numbers and their properties; extended to integers, rationals, and irrationals; study of why and how of algorithms for all operations; topics in informal geometry.

Mathematics 241. Introduction to Calculus and Analytic Geometry. *Four hours*
Inequalities, the straight line, conic sections, limits, the derivative, differentiation of algebraic functions, applications of the derivative, extrema, and the antiderivative. *Prerequisite:* Mathematics 111 or permission of instructor.

Mathematics 242. Intermediate Calculus and Analytic Geometry. *Four hours*
The integral, applications of the integral, logarithmic and exponential functions, trigonometric functions, hyperbolic functions, techniques of integration, L'Hospital's Rule and indeterminate forms, and improper integrals. *Prerequisite:* Mathematics 241.

Mathematics 331. Introduction to Linear Algebra. *Three hours*
Vector algebra in Euclidean spaces, lines and planes in space, matrices and linear equations, groups, and rings. *Prerequisite:* Math 111 and the permission of the instructor.

Mathematics 332. Linear Algebra. *Three hours*
Vector spaces, subspaces, linear independence, linear transformations, determinants, inner product spaces, orthogonality, and unitary transformations. *Prerequisite:* Mathematics 331.

Mathematics 341. Advanced Calculus and Analytic Geometry. *Four hours*
Topics selected from polar coordinates, vectors, solid analytic geometry, partial differentiation, multiple integration, infinite series, and differential equations. *Prerequisite:* Mathematics 242.

Mathematics 372. Probability and Mathematical Statistics. *Three hours*
Theoretical probability using point set approach; probability as a frequency ratio; probability for finite sample spaces; conditional probability; joint and continuous distributions; binomial distribution; Baye's theorem; statistical applications of probability; theory of sampling and variance. *Prerequisite:* Mathematics 242, which may be taken concurrently, and permission of the instructor.

Mathematics 401. College Geometry. *Three hours*
Historical introduction to Euclid's elements, logic, points, lines, planes, real numbers and the ruler axiom, separation in the plane and in space, angles and the protractor axiom, congruence, circles, and spheres. *Prerequisite:* Mathematics 241 and permission of the instructor.

Mathematics 402. Functions of a Complex Variable. *Three hours*
Complex numbers, analytic functions, elementary functions of a complex variable, Cauchy's formula, Liouville's theorem, Laurent's series, residues, contour integration, conformal mapping, physical applications.

Mathematics 403. Introduction to Analysis I. *Three hours*
Sets and functions, topological ideas, LUB property, real sequences, continuity, mean value theorems, integration, definite integrals, Taylor's theorems, improper integrals, convergence of infinite series, power series, improper integrals with parameter.

Mathematics 404. Introduction to Analysis II. *Three hours*
Differentiation, inverse functions, implicit function theorems, applications to geometry and analysis, differential geometry and vector calculus, integration over curves and surfaces, differential forms, theorems of Green, Gauss, and Stokes, field theory, calculus of variations.

Mathematics 471. Differential Equations. *Three hours*
Differential equations of first order and first degree, differential equations of first order and higher degree, differential operators and linear differential equations, reduction of order. *Prerequisite:* Mathematics 341.

Mathematics 495. Independent Study. *Three hours*
Independent work on topics selected to meet the student's needs. For Mathematics majors only. *Prerequisite:* Senior standing and permission of the instructor. May be offered in either semester.

Mathematics 531. Topics in Modern Math for Elementary Teachers. *Three hours*
A study from a theoretical viewpoint of some topics in mathematics that are taught in elementary school. The course will begin with a study of logic and include topics selected from sets; arithmetical operations on the whole numbers, the integers, rational numbers and real numbers; numeration systems; some elementary number theory; measurement; other topics in informal geometry. This course is the required course for a graduate student wishing endorsement of his high school certificate. Credit will not be granted for this course to a student who has completed both Math 203 and 204.

Mathematics 532. Modern Math Laboratory. *Three hours*
An active involvement in laboratory experiments with multibase blocks, sets, Cuisenaire rods, geoboards, etc.; development of skills in the production and use of place value charts, math balance, fraction bars, games, etc.; creation of a mathematics learning center for the classroom along with the appropriate activity cards for each module. *Prerequisite:* Math 531, or Math 203, 204.

PHYSICS

Requirements for a Major: Thirty semester hours consisting of Physics numbered 211 or above. Chemistry 111-112.

Requirements for a Minor: Twenty-one semester hours consisting of Physics numbered 211 or above. Chemistry 111-112.

Physics majors will normally take Physics 211, 212, and Math 111, 241, and 242 during their freshman and sophomore years.

Physics 111-112 is intended for Life Science students and other non-science students.

Physics 111-112. General Physics. *Four hours each*
Mechanics of motion and equilibrium; properties of solids, liquids and gases; thermal phenomena; wave motion and vibrations; electricity and magnetism; optics; topics in modern physics. Does not count toward major or minor. *Prerequisite:* Mathematics 111.

Physics 211. Mechanics, Heat, Wave Motion, and Sound. *Four hours*
Mechanics of solids, liquids, and gases; laws of thermodynamics; kinetic-molecular theory; vibrating bodies; standing waves; Doppler effect. *Prerequisite:* Mathematics 241, which may be taken concurrently.

Physics 212. Electricity and Magnetism, Light and Nucleonics. *Four hours*
Laws of Coulomb, Faraday, Ampere, Ohm, Joule, and Lenz; electromagnetic theory; lenses, prisms, and mirrors; polarization; photo-electric and Compton effects; nuclear energy; waves and corpuscles; relativistic effects. *Prerequisite:* Physics 211. Satisfies all specific objectives listed.

Physics 311. Heat and Thermodynamics. *Four hours*
Thermometry and Calorimetry; ideal gas laws; changes of state; equations of state; black body radiation; reversible and irreversible processes; laws of thermo-dynamics; Fourier Series and heat conduction; enthalpy and entropy; heat engines; adiabatic and isothermal processes; kinetic theory of gases and liquids. *Prerequisite:* Physics 212 and Math 241, which may be taken concurrently. Alternate years.

Physics 312. Electricity and Magnetism. *Four hours*
Electric charges, forces, fields and potential with associated magnetic forces and fields; dielectric theory; capacitance, inductance, resonance, oscillation; series, parallel DC and AC circuits; measuring instruments; thermo-devices electromagnets; motor and generator principles; transformers; Maxwell's equations and electromagnetic waves. *Prerequisite:* Physics 212 and Math 241. Alternate years.

Physics 401. Physical Optics. *Four hours*
Geometrical optics, propagation and superposition of waves, interference, diffraction, absorption, dispersion, polarization, interference of polarized light and double refraction. *Prerequisite:* Physics 212 and Math 241. Alternate years.

Physics 410-411. Theoretical Mechanics. *Three hours each*
Kinematics and dynamics of particles and rigid bodies, damped and forced oscillator, motion under central force, moving coordinate systems, holonomous mechanical systems and equations of Lagrange and Hamilton. *Prerequisite:* Physics 211 and Math 241. Alternate years.

Physics 412. Atomic and Nuclear Physics. *Three hours*
Introduction to wave mechanics, spectra and structure of atoms and molecules, aggregates of atoms, structure of nucleus, elementary particles and nuclear energy. *Prerequisite:* Physics 212 and Math 241. Alternate years.

Physics 495. Independent Study. *Three hours*

"Often in our hurried search for knowledge we become content with facts and information that are transient and circumstantial. While it is important for us to move forward, it is also necessary that we have some quiet hours for reflection. Reflective thought allows time for the synthesis and integration of prior experiences out of which comes understanding. When we have achieved understanding we have acquired knowledge."

Deril K. Mays,
Chairman of the Division of Social Sciences

Division of Social Sciences

Deril K. Mays, *Chairman*
1. Department of Behavioral Sciences 2. Department of History and Political Science
3. Department of Social Work 4. Appalachian Semester

1. DEPARTMENT OF BEHAVIORAL SCIENCES

Deril K. Mays, *Department Head*
Psychology — Sociology

The two departmental courses listed below are "core" courses in the Behavioral Sciences curriculum. Both courses are required as a part of the Psychology and Sociology majors and minors.

Behavioral Sciences 245. Statistics for the Behavioral Sciences. *Three hours*
An introductory course to prepare students to better understand the scientific analysis of psychological and sociological phenomena. Concepts and principles of descriptive and inferential statistics.

Behavioral Sciences 341. Methods of Behavioral Sciences Research. *Three hours*
Techniques of behavioral sciences research, including survey design and the collection, analysis, and interpretation of data. Lecture and laboratory.

PSYCHOLOGY

Requirements for a Major: Thirty semester hours, including Behavioral Sciences 245, 341, Psychology 111, 210, 361, 452G, and 460G.

Requirements for a Minor: Twenty-one semester hours, including Behavioral Sciences 245, 341, Psychology 111, 210, and 361.

Psychology 111. Introduction to Psychology. *Three hours*
Emphasis on the study of human behavior and the ability of the individual to make adjustments to his environment.

Psychology 210. Child Development. *Four hours*
Emphasis on recent child development theories with laboratory experiences with children on a one-to-one basis.

Psychology 361. Psychology of Learning. *Three hours*
Basic concepts and principles of learning with emphasis upon human and animal laboratory studies.

Psychology 402G. Counseling Theories and Techniques. *Three hours*
Basic theories, types, and techniques of counseling. Practice in individual and group techniques of interviewing. Permission of the Department Head required.

Psychology 411G. Educational Psychology. *Three hours*
Basic concepts related to mental development, appraisal and diagnosis, and learning theory applicable to educational practices.

Psychology 430G. Social Psychology. *Three hours*
Major emphasis is on problems involved in human relations. Designed to help the individual to understand and adjust to group thought and action. Attention is given to recent psychological and sociological research in human relations.

Psychology 431G. Mental Hygiene. *Three hours*
Factors determining the development of personality, principles of mental health, and problems involved in the dynamics of human adjustment.

Psychology 452G. Abnormal Psychology. *Three hours*
Mental disorder, changing conceptions of normality, the more common forms of mental disorders, their psychological interpretation, principles of effective mental hygiene, and contemporary approaches to psychotherapy.

Psychology 460G. Theories of Personality. *Three hours*
Nature of personality structure and dynamics. Classical psychoanalysis, social psychological, and stimulus-response theories included.

Psychology 461G. History and Systems of Psychology. *Three hours*
Origins of psychological thought within science and philosophy, tracing the development of systems and theories within German, British, and American psychology.

Psychology 470G. Theories of Learning. *Three hours*
Basic fundamentals of learning theory as formulated by such theorists as Thorndike, Pavlov, Guthrie, Skinner, and Hull. Attention is given to the empirical support of various theories.

Psychology 495. Independent Study. *One to three hours*

Psychology 525. Psychology of Reading. *Three hours*
Theory and applications of learning principles as applied to the reading processes. Major emphasis relates to respondent, operant, and perceptual learning paradigms.

Psychology 595. Independent Study *One to three hours*

SOCIOLOGY

Requirements for a Major: Thirty semester hours, including Behavioral Sciences 245, 341, Sociology 131, 460G. Psychology 430G is strongly recommended and will be credited toward the thirty semester hour requirement.

Requirements for a Minor: Twenty-one semester hours, including Behavioral Sciences 245, 341, Sociology 131. Psychology 430G is strongly recommended and will be credited toward the twenty-one semester hour requirement.

Sociology 131. Introduction to Sociology. *Three hours*
The social interaction of persons and groups; man's cultural heritage and social nature; analysis and principles of group life; forms of collective behavior; the process of socialization; social structure, interaction and reorganization, including race relations and social class; a variety of social institutions; the family, education, religion; the economy and politics; social change.

Sociology 221. Introduction to Anthropology. *Three hours*
A survey of the archaeological and biological history of mankind as it relates to the development of man in his culture, with comparisons drawn between the cultures of primitive people and Western Civilization.

Sociology 251. Current Socio-Economic Problems. *Three hours*
Scientific understanding of social problems; problem areas in contemporary American society; types of personal disorders and role impairment; the influences of social change on the structure of society. Attention is also given to the question of why certain forms of deviance become defined as social problems.

Sociology 271. Marriage and the Family. *Three hours*
Background experiences in the lives of young people leading up to courtship and marriage; the establishment and functioning of the home, with related biological and social factors. Emphasis upon changing attitudes toward family relationships, some of the problems involved, and suggested solutions.

Sociology 311. Human Ecology. *Three hours*
Population distribution, growth, and composition, and its relevance to current economic, social, and political problems.

Sociology 345. Appalachian Semester Orientation Seminar. *Three hours*
An introduction to Appalachian culture, including an introduction to the nature of dialects, analyzed from the viewpoint of linguistics and with reference to dialects of Appalachia.

Sociology 349. Economics and Appalachian Poverty. *Three hours*
A theoretical and empirical study of the economics of poverty in Southern Appalachia with special emphasis on the major economics bases; including an examination of pertinent historical and geographic characteristics.

Sociology 353. Minority Groups. *Three hours*
A social scientific study of the origin and organization of minorities and their effect on society, with particular emphasis on minorities in the United States.

Sociology 371. Social Institutions. *Three hours*
An examination of the structure and function of social institutions, with primary orientation within the American milieu. Particular emphasis on socialization, stratification, social change, and relations among institutions.

Sociology 421G. Rural and Urban Sociology. *Three hours*
Comparative and interrelated study of urban and rural life considering physical, institutional, social and economic factors of modern life in cities and in the countryside.

Sociology 422G. Social Institutions in Appalachia. *Three hours*
A theoretical and empirical analysis of the cultural and social characteristics of the Appalachian Region from an institutional point of view.

Sociology 441G. Cultural Anthropology. *Three hours*
Principles and methods of anthropology applied to modern and primitive societies. A cross-cultural survey and analysis of social institutions, religion, art, beliefs, values, and languages of people in industrial and non-industrial societies. A critical analysis If leading theoretical ideas in the field.

Sociology 460G. Sociological Theory. *Three hours*
The major theories which have proved useful in investigating the nature of society are examined as cultural products, ideologies, and scientific models. Special attention is given to major figures such as Comte, Durkheim, Weber, Merton, C. Wright Mills, White, and Sorokin in the emergence and convergence of their theoretical development. Lecture and discussion in a seminar setting.

Sociology 461G. Criminology. *Three hours*
A theoretical and empirical approach to crime and delinquency. A general survey of juvenile delinquency, corrective institutions, and crime prevention programs.

Sociology 472. Sociology of Religion. *Three hours*
A sociological analysis of religious belief systems utilizing the comparative or cross-cultural approach; social aspects of religion and religious aspects of society; the impact of social and

ecological forces upon religious institutions; social origins of religions and denominations and the role of religion in social control and social change.

Sociology 495. Independent Study. *One to three hours*

Sociology 511. Educational Sociology. *Three hours*
Analysis of educational institutions in terms of the interaction of individuals and groups, educational processes, school and community relations, and the function of the educator as an agent of socialization.

Sociology 595. Independent Study. *One to three hours*

2. DEPARTMENT OF HISTORY AND POLITICAL SCIENCE

William S. Oxendine, *Department Head*

PRE-LAW

Most law school admissions committees require a student to have a four-year college program leading to a Bachelor of Arts or Bachelor of Science degree, or equivalence, plus an acceptable score on the Law School Admissions Test. In general, law schools suggest a liberal college education rather than one that is narrow in specialization. Normally, a student will register for one of the regular degree programs and will include in his elective hours as many courses as possible from the following disciplines: accounting, history, political science, philosophy, and English.

HISTORY

Requirements for a Major: Thirty semester hours of history plus six semester hours of political science. Fifteen semester hours must be United States history and twelve semester hours must be non-United States history. The non-United States history must include History 130 and History 200 plus one additional course of either History 331 or History 332. The political science requirement within this major must include Political Science 311 plus either Political Science 441 or Political Science 465.

Requirements for a Minor: Twenty-one semester hours. Twelve hours must be United States history and nine hours must be non-United States history.

History 101. United States from Colonial Beginnings to 1877. *Three hours*

History 102. United States from the Reconstruction to the Present. *Three hours*

History 130. Ancient and Medieval Europe. *Three hours*
A history of Europe from ancient times to 1300.

History 200. Historical Research and Methods. *Three hours*
Gathering and criticism of data; bibliographies and aids; problems in historiography, composition analysis, and the final monograph. History majors should take this course in their sophomore year.

History 221. Kentucky History. *Three hours*
Kentucky from colonial times to the present.

History 241. American Economic History. *Three hours*
Economic history of the United States.

History 311. United States Colonial and Revolutionary Eras 1600-1815. *Three hours*
An examination of the major historiographical problems and conflicting historical interpretations of these eras. Topics emphasized will be Puritanism, Motivation for Settlement, Nature of Colonial Political and Social Culture, Reason for the Revolution, The Meaning of the Constitution, and the Nation's early problems.

History 312. The Middle Period of United States History 1815-1877. *Three hours*
An examination of the major historiographical problems and conflicting historical interpretations; understanding why wide variations in historical writings exist of the

Jacksonian and Civil War-Reconstruction Periods. Topics include Slavery and its impact, political basis of Jacksonian Presidents, Expansion, Causes of the Civil War, and the Meaning of Reconstruction.

History 313. Industrial America 1877-1928. *Three hours*
An examination of the major historiographical problems and conflicting historical interpretations of the writings concerning this period. Topics emphasized include the Gilded Age, Corruption, Populism, Progressivism, World War I, and the 1920's.

History 323. Latin America. *Three hours*
A survey of Latin American history from the discoveries by Columbus to the present with the major emphasis on Mexico and the Caribbean.

History 331. Renaissance Europe. *Three hours*
A history of Europe from the Renaissance to the Congress of Vienna in 1815.

History 332. Modern Europe. *Three hours*
A history of Europe from 1815 to the present.

History 353. Church History. *Three hours*

History 393. American Constitutional History: Civil and Political Rights. *Three hours*
An examination of the political and civil rights of the American people from the 1760's to the present.

History 442G. Britain in the 20th Century. *Three hours*
The history of Great Britain since 1900.

History 446G. History of Russia. *Three hours*
The history of Russia since the 17th century.

History 470G. Recent American History. *Three hours*
Selected topics on the Nation's history since 1900.

History 495. Independent Study. *Three hours*

History 521. American Colonial Culture. *Three hours*
The background; travel, everyday life, and intellectual pursuits; economic enterprises—capitalism, commerce, household industries; the laborer and colonial craftsman; and frontier agriculture.

History 531. The American Revolutionary Era. *Three hours*
The background of the revolution; Continental Congress and the Confederation at work; internal problems and strife; military and naval events; foreign relations; the road to final independence and peace.

History 551. Civil War and Reconstruction. *Three hours*
A study of the Civil War and Reconstruction period in American history.

History 595. Independent Study. *Three hours*

POLITICAL SCIENCE

Requirements for a Minor: Twenty-one semester hours.

Political Science 110. Critical Issues in American Politics and Government. *Three hours*
A study of selected public policy problems facing Americans in the contemporary political context.

Political Science 212. American State and Local Government. *Three hours*
The organization of the state government; state government at work; relationships between states and government at the national level; local government in counties, small towns, and large municipalities.

Political Science 245. Contemporary International Problems. *Three hours*
A study of selected issues in world affairs which are of significant importance to the well-being of people in the United States and the globe.

Political Science 311. American National Government. *Three hours*
A study of the structure and function of the national government in theory and in practice.

Political Science 371. Political Thought: Philosophy and Ideology. *Three hours*
The nature, scope, and methods of political science; development of political thought from ancient to modern times; the philosophy of the ideological variations, the democratic concept of the function of government. A topic examination of basic political concepts as developed in the thought of great philosophers and expressed in contemporary ideologies and forms of government. Topics studied include: freedom, equality, authority, revolution, order, justice, civil obligation, and others.

Political Science 441. International Relations. *Three hours*
Study of international conflict and cooperation; war-making and peace-making; diplomacy; international economics; international law; international organizations; nationalism and internationalism; and the relationship of national and international politics and events.

Political Science 465. Comparative Politics: The Major Western Powers. *Three hours*
Study of the nature of politics and the operation, function, and output of the government of Great Britain, France, the Soviet Union, and the United States.

Political Science 495. Independent Study. *One to three hours*

3. DEPARTMENT OF SOCIAL WORK

L. James Cox, Department Head

Requirements for a Major: A major will consist of forty-three semester hours, including Social Work 171, 361, 371, 372, 401 and 402; six hours of 300-400 level electives within the Social Work curriculum; Psychology 210 and 460G; Behavioral Sciences 245 and 341. It is recommended that students majoring in Social Work also do concentrated study in psychology, sociology, political science, and economics. A list of recommended electives is available from the Social Work department.

Social Work 171. Fields of Social Work. *Three hours*
An introduction to Social Work, utilizing agency staff and clientele to develop a philosophy of service.

Social Work 361. Social Welfare as a Social Institution. *Three hours*
A study of the evolution of social welfare programming. Survey material will cover the areas of programming for education, minority groups, public and mental health, retirement and aging, corrections, and public welfare. Emphasis will be on the integration of social theory, political thought, historical perspectives and economic theory to the areas of study. Coverage of future trends in policy, legislation, and programming is included.

Social Work 371-372. Methods of Social Work Practice I and II. *Three hours each*
Social Work 371 and 372 is a two semester study of social work practice and its methods. A concentrated effort is made to understand human behavior and common human needs, and a study is made of practice concepts of casework, groupwork, and community organization. Some survey of newer interventive methods is included: special areas of interest and in the problems of social work practice. Social Work 361 is a prerequisite to Social Work 371. Social Work 371 is prerequisite to Social Work 372.

Social Work 373. Social Work with Children. *Three hours*
A survey of child welfare agencies, concentrating on the problems of adoption, protective services, juvenile delinquency, and school adjustment. Special interest in modification of and use of social work skills in solving these problems.

Social Work 374. Correctional Services. *Three hours*
This course is designed to familiarize the student with the interplay of social, cultural, and psychological factors influencing the operation and structure of correctional systems. Emphasis will be placed on understanding the function, responsibilities, and role performances of the social worker within the correctional process.

Social Work 375. Social Policy Development and Community Organization. *Three hours*
This course examines the role of the social worker in social policy formulation and implementation. It includes examination of social science concepts and reviews the methods, processes, and involvement in social planning.

Social Work 376. Geriatric Services. *Three hours*
This course surveys the special problems and needs of the aged, with focus on the role of the social worker in planning and providing services. The student is involved in lab experiences in the delivery of care to nursing patients.

Social Work 377. Social Work in the Mental Health Setting. *Three hours*
A study of social work methods and contributions in the psychiatric setting, knowledge and understanding of human behavior, treatment of modalities and therapy with an emphasis on an interdiscipline approach in community treatment.

Social Work 401-402. Social Work Field Practicum I and II. *Six hours each*
Supervised practice experience in agencies, institutions, or with other social systems. Students will spend approximately sixteen hours a week in the field and will attend a regular seminar to coordinate the field and classroom experiences; application should be made in advance to the Department of Social Work. Students may elect to take a "Block Placement" by combining the two field practicums during one semester for a total of five days a week in the field or 40 hours. A supervisory seminar and independent study relating to the field experience are included in the fifteen semester hours credit for the Block Placement. Students should register for Social Work 401, 402, and 495B for a Block Placement, and application should be made in advance to the Department of Social Work.

Social Work 495. Independent Study. *One to three hours*

4. APPALACHIAN SEMESTER

Julian D. Mosley, *Director*

OBJECTIVES

1. To provide information and activities that will assist in eliminating regional stereotypes and promote appreciation of positive aspects of the region and its people.
2. To provide an extensive, integrated, interdisciplinary body of information and opportunities for developing an integrated group of skills beyond those ordinarily obtained in a major in order to better equip individuals for careers.
3. To provide information and activities that will contribute to the development of maturity, self-understanding, and adaptability in increasingly complex environments.
4. To provide information and activities that will contribute to a better understanding of the nature of social change and the means by which the direction of change can be affected.
5. To provide opportunities for students and faculty to participate in research and direct service to the region.

Sociology 345. Appalachian Semester Orientation Seminar. Three hours
Sociology 349. Economics and Appalachian Poverty. Three hours
Sociology 422G. Social Institutions in Appalachia. Three hours

Appalachian Field Practicum, designated by numbers 287 and 487, is offered at both lower and upper division levels and in a variety of academic disciplines. These are field work courses which may involve either experiential learning of a regional nature in a service agency or other institutional setting, or directed study in the region at large. Each course is offered for six hours credit, which is readily available in history, sociology, or social work. Credit in other disciplines is available on a negotiated basis. Students desiring academic credit in disciplines other than those listed above should apply for admission as early in advance as possible.

An introductory knowledge of social studies and permission of the director are prerequisites for enrollment in the program. A course in social work methods or in social research methods is highly recommended as a prerequisite for participants desiring upper division field work credit in social work and sociology respectively.

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Charles C. Saddler, Jr. *Director of Experiential Education*
Assistant to the President
A.B., Oakland City College; M.A. University of Illinois; Colorado State College of Education, summer 1950.

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A.B., M.Div., M.A., D.D., L.H.D.

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B.S., Virginia Polytechnic Institute; B.D. M.Div., Candler School of Theology, Emory University; additional study, Lexington Theological Seminary.

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PLEASE SEND ME INFORMATION ON:

( ) Admission
( ) Financial Aid
( ) Graduate School
( ) Summer School
( ) Appalachian Semester

( ) I would like to talk with a college representative.
( ) I am interested in transferring from another school.

Name_____ Address_____

City, State, Zip_____

Name of High School_____

Date of Graduation_____ Home Phone_____

Academic or Career Interest_____

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( ) Financial Aid
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Date of Graduation_____ Home Phone_____

Academic or Career Interest_____

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OFFICE OF ADMISSIONS

UNION COLLEGE

BARBOURVILLE, KY. 40906

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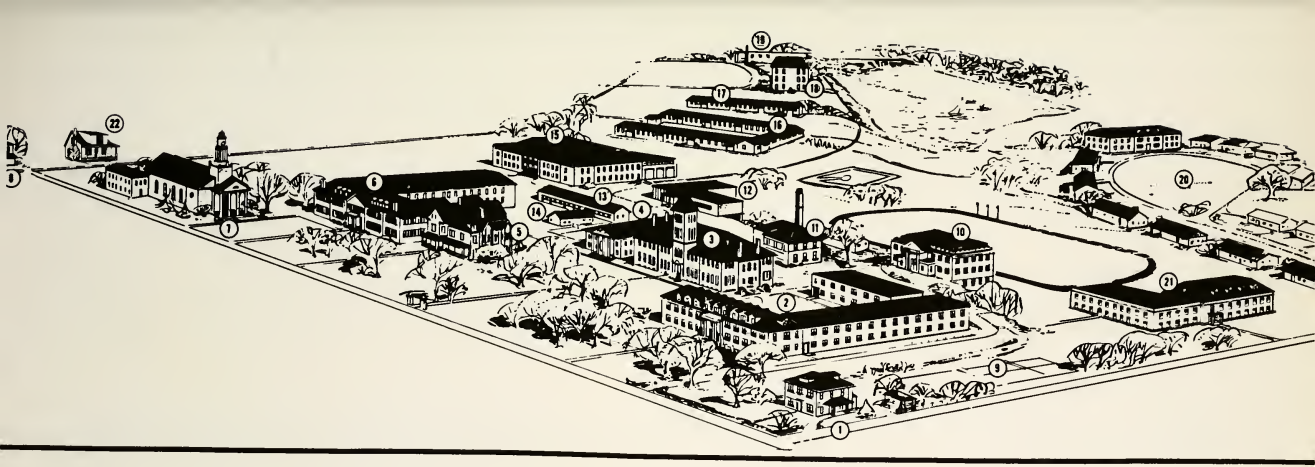
BARBOURVILLE, KY. 40906



1. Baldwin Place, President's Residence
2. Stevenson Hall, Men's Residence
3. Classroom Building
4. Library
5. Speed Hall, Administration Building
6. Pfeiffer Hall, Women's Residence
7. Conway Boatman Chapel—Fine Arts Building
8. Home Economics Building
9. Tennis Courts
10. Dramatic Arts Center
11. Business Department
12. Student Center
13. Storage Buildings
14. Data Processing Center
15. Physical Education Building and Swimming Pool
16. College Courts, Married Students Apartments
17. College Courts Addition
18. Lakeside Hall, Men's Residence
19. Bureau of Mines Education Center
20. College Park, Faculty Housing
21. Mahlon Miller Science Center
22. Mental Health Center

McTerrin

UNION COLLEGE

IN KENTUCKY

1976 • 1977

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DIRECTORY FOR CORRESPONDENCE

Academic Work ..... *Vice President for Academic Affairs*
Admission to the College ..... *Director of Admissions*
Admission to the Graduate School ..... *Assistant Vice President for Graduate Affairs*
Alumni Affairs ..... *Director of Alumni Affairs*
Applications for Admission, Catalogs ..... *Director of Admissions*
Charges and Payments of Bills ..... *Business Manager*
Gifts and Bequests ..... *Vice President for Development*
Personal Welfare, Health of Students, Housing ..... *Dean of Students*
Scholarships, Workships and Loans ..... *Director of Student Financial Aid*
Transcripts—Academic Records—Veterans Affairs ..... *Registrar*

LOCATIONS AND TELEPHONES

All offices are located in Speed Hall unless otherwise noted. The telephone number for Union College is (606) 546-4151. The extensions listed will contact you with the appropriate office.

President ..... Extension 111
Vice President for Academic Affairs ..... Extension 112
Assistant Vice President for Graduate Affairs ..... Extension 124
Business Manager and Treasurer ..... Extension 115
Dean of Students ..... Extension 118
Office of Public Information ..... Extension 110
Office of Admissions ..... Extension 117
Office of Development ..... Extension 195
Office of Financial Aid ..... Extension 171
Registrar ..... Extension 114

Vol. XXXVIII UNION COLLEGE BULLETIN No. 1
March, 1976

PUBLISHED QUARTERLY
UNION COLLEGE
BARBOURVILLE, KENTUCKY 40906

Entered as a second-class matter at the post office at Barbourville, Kentucky, 40906, under Act of Congress, August 24, 1912.

Union College is accredited by the Southern Association of Colleges and Schools, and by the Kentucky Department of Education. Union admits students of any race, color, and national or ethnic origin.

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Mahlon A. Miller,
President of the College

A College With a Mission

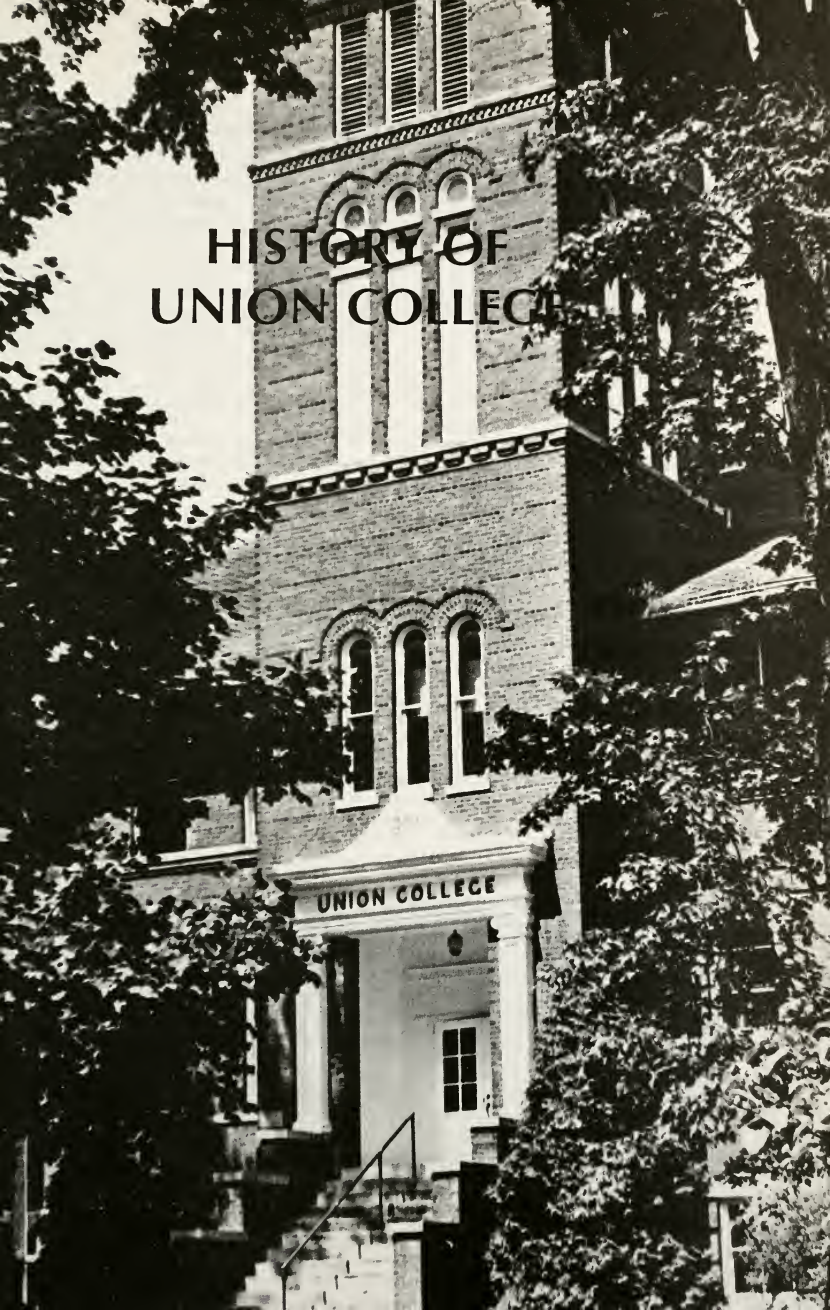
Union College, affiliated with The United Methodist Church, is a nonsectarian coeducational institution serving students without regard to race, color, and national or ethnic origin. The college emphasizes stimulating teaching, and a concern for individual needs and strength of character. Classes are small, the curriculum is flexible, opportunities for counseling and guidance are abundant, and widespread student involvement in institutional governance aids in the development of responsible leadership.

While it is recognized that Union College cannot be all things to all people, the institution provides a variety of educational programs. Union College offers the following types of educational alternatives: updated and restructured liberal arts bachelor's degree programs; professional and pre-professional bachelor's degree curricula; Appalachian Regional Studies; occupational-oriented certificate and associate degree programs; master's degree curricula in education; and special non-degree continuing education for upgrading occupational skills and/or personal enrichment.

The institution's primary mission is to help improve the quality of life and living conditions in Appalachia by serving the people of Appalachia. The college offers a variety of quality programs that are attractive to a broad spectrum of students, provides for all students the basis for understanding the distinctive features of Appalachia, provides students with alternative approaches to learning and acquiring a degree, structures the curricula in such a manner as to implement the career ladder concept, assists students in planning and preparing for life and for careers, and delivers services directly to the people of the nearby region.

The campus atmosphere stimulates intellectual curiosity and academic competence, encourages commitment to Christian ideals, and supports the development of the spiritual, social, and physical resources needed to live creatively and wholesomely in a changing world.

HISTORY OF UNION COLLEGE



Union College was founded in 1879 by a group of progressive citizens of Barbourville who formed a stock company and secured the main part of the present campus. In 1880 the first building was formally opened on the site of what is now known as the Classroom Building.

The college was purchased by the Kentucky Conference of the Methodist Episcopal Church in 1886, and Daniel Stevenson, President of Augusta Collegiate Institute at Augusta, Kentucky, was made President of the reorganized institution. A major bequest from Mrs. Fanny Speed led to the construction of Speed Hall, Stevenson Hall, and the Classroom Building.

The college department was discontinued in 1908 and for eight years the institution was maintained as a Junior College, an academy, and an elementary school. It became a *bona fide* college again in the Presidency of Ezra T. Franklin, who inaugurated a program of development during which the Memorial Gymnasium and a home for the President were built, and the invested funds of the college were materially increased. In 1927 the College was accredited by the University of Kentucky as a four-year college of A grade.

President John O. Gross emphasized the improvement of the curriculum and the building of a strong faculty. His ambition was to see Union College fully accredited. In 1931 it was accredited by the University Senate of the Methodist Episcopal Church, and in 1932 full accreditation was realized when it was made a member of the Southern Association of Colleges and Schools. The Board of Regents of the University of the State of New York placed Union College on its accredited list in 1937. During this administration, land adjacent to the campus was purchased, a maintenance building was erected, and the financial structure was reorganized.

In Conway Boatman's twenty-one years of leadership, the college achieved marked progress in both its educational and plant improvement programs. Seven new buildings were completed and others were enlarged. The curriculum was expanded, endowment funds were increased, and a markedly improved program of faculty salaries and benefits was adopted.

Mahlon A. Miller was elected to the presidency in 1959. In 1960 a Master of Arts in Education degree program was introduced and plant expansion continued with the development of College Park, a faculty residential area, followed by the construction of additional student housing, a physical education building and a student center. The latest addition, a science center, was completed in 1973.

The college has always accepted a special mission to Appalachia, a thrust that is now being strengthened with unique academic programs based on regional characteristics, expanded student financial aid, student community service projects, and new career-oriented curricula. As the college moves toward its centennial, it is expanding and enriching its service to Appalachia while at the same time fulfilling the needs of the many students from other states who come to Union College for an education.

Union College is also accredited by the Kentucky Department of Education.

Location, Campus and Buildings

Union College is located in Barbourville, a residential town of 3,500, on U.S. highway 25E midway between Lexington, Kentucky, and Knoxville, Tennessee. The historic Wilderness Road runs along the eastern edge of the campus. Cumberland Gap National Historical Park, the location of the Union College Environmental Education Center, is thirty miles away. The Doctor Thomas Walker State Park is four miles from the campus and in adjoining counties are the Cumberland Falls State Park, the Levi Jackson State Park, and the Pine Mountain State Park.

The county seat of Knox County, Barbourville is served by Greyhound buses enroute to Knoxville, Lexington, Louisville, and Cincinnati. The London-Corbin Airport, approximately thirty miles from the campus, is served by the Piedmont Airlines.

On one of the most picturesque campuses of the South, Union College is proud of its Georgian colonial buildings. Shaded by overhanging elms, the red brick buildings give the campus a majestic charm of dignity and beauty.

Speed Hall (Administration Building), 1897-1905. A gift from the estate of Mrs. Fanny Speed of Louisville, Ky. Her bequest also partially financed the Classroom Building and Stevenson Hall.

Classroom Building (formerly the Administration Building), 1907.

Stevenson Hall—Men's Dormitory, 1907. Wings added 1956.

Dramatic Arts Center, (formerly Gymnasium), 1919; remodeled 1965.

Baldwin Place, the home of the President, 1925. The gift of Mr. and Mrs. F. E. Baldwin, Elmira, N. Y.

Maintenance Building, 1938, originally equipped by a gift from the estate of Robert Norton, New Albany, Indiana.

Abigail E. Weeks Memorial Library, 1941. Originally furnished by a gift from Mrs. Abbie E. Stewart.

Pfeiffer Hall—Women's Dormitory, 1942. Wing added 1960. The original wing was a gift from the estate of Mr. and Mrs. Henry Pfeiffer of New York City.

Home Economics Building, 1946; remodeled 1966.

Conway Boatman Chapel and Fine Arts Building, 1949.

College Courts—Residences for married students, 1954. Expanded in 1964.

Religious Life Center, 1975.

Physical Education Building, 1964, including the Swimming Pool, 1957.

Lakeside Residence Hall, Men's Dormitory, 1964.

Student Center, 1964.

College Park, 1960. Faculty residential area.

Langford Apartments, 1962. Gifts from the estates of Miss Mary Kyle Dugan and Mrs. Mary Gilbert Langford in memory of Mr. and Mrs. George Langford. Housing for faculty and staff.

Environmental Education Center, Cumberland Gap National Historical Park, Middlesboro, 1970.

Mahlon Miller Science Center, 1973.

CALENDAR 1976-77

Summer Session 1976, First Term

June 6, Sunday	Dormitories open, 8 a.m.; First meal in dining hall, 5 p.m.
June 7, Monday	Registration for first term, 9 a.m.
June 8, Tuesday	Classes begin, 7:30 a.m.
June 10, Thursday	Last day to register for first term and last day to apply for August 1976 graduation
July 2, Friday	Last day to drop a course.
July 9, Friday	First term ends, 4 p.m.

Summer Session 1976, Second Term

July 12, Monday	Registration for second term, 9 a.m.
July 13, Tuesday	Classes begin, 7:30 a.m.
July 15, Thursday	Last day to register for second term.
August 6, Friday	Last day to drop a course.
August 13, Friday	Summer Commencement, 10:30 a.m.; Last meal in dining hall, 12 noon; Dormitories close, 4 p.m.

Fall Semester 1976

August 27, Friday	Administrative Meeting
August 28, Saturday	Faculty Meeting
August 29, Sunday	Dormitories Open
August 29, Sunday	Parents Orientation
August 29, Sunday	New Student Orientation
August 30, Monday	Orientation and Counseling
August 31, Tuesday	Registration (undergraduate)
September 1, Wednesday	Classes Begin
September 4, Saturday	Graduate Registration
September 11, Saturday	Last Day to Add Class or Apply for January Graduation
September 11, Saturday	Record Date for Determination of Fall Credit Load
October 16 (4 pm)-24	Fall Vacation
October 24, Sunday	Dormitories Re-open
October 26, Tuesday	Mid-Semester Grade Reports
November 5, Friday	Founders Day Convocation
November 6, Saturday	Last Day to Drop or Cr/NCr
November 11, Friday	Pre-Registration, January Term
November 25, Thursday	Thanksgiving Vacation
December 4, Saturday	Graduate School Comprehensives
December 15-18	Final Examinations
December 17, Friday	Last Day of Undergraduate Classes
December 18, Saturday	Last Day of Graduate Classes
December 18, Saturday	Dormitories Close

January Interin 1977

January 2, Sunday	Dormitories Open
January 3, Monday	Registration
January 7, Friday	Last Day to Elect Cr/NCr
January 21, Friday	Term Ends

Spring Semester 1977

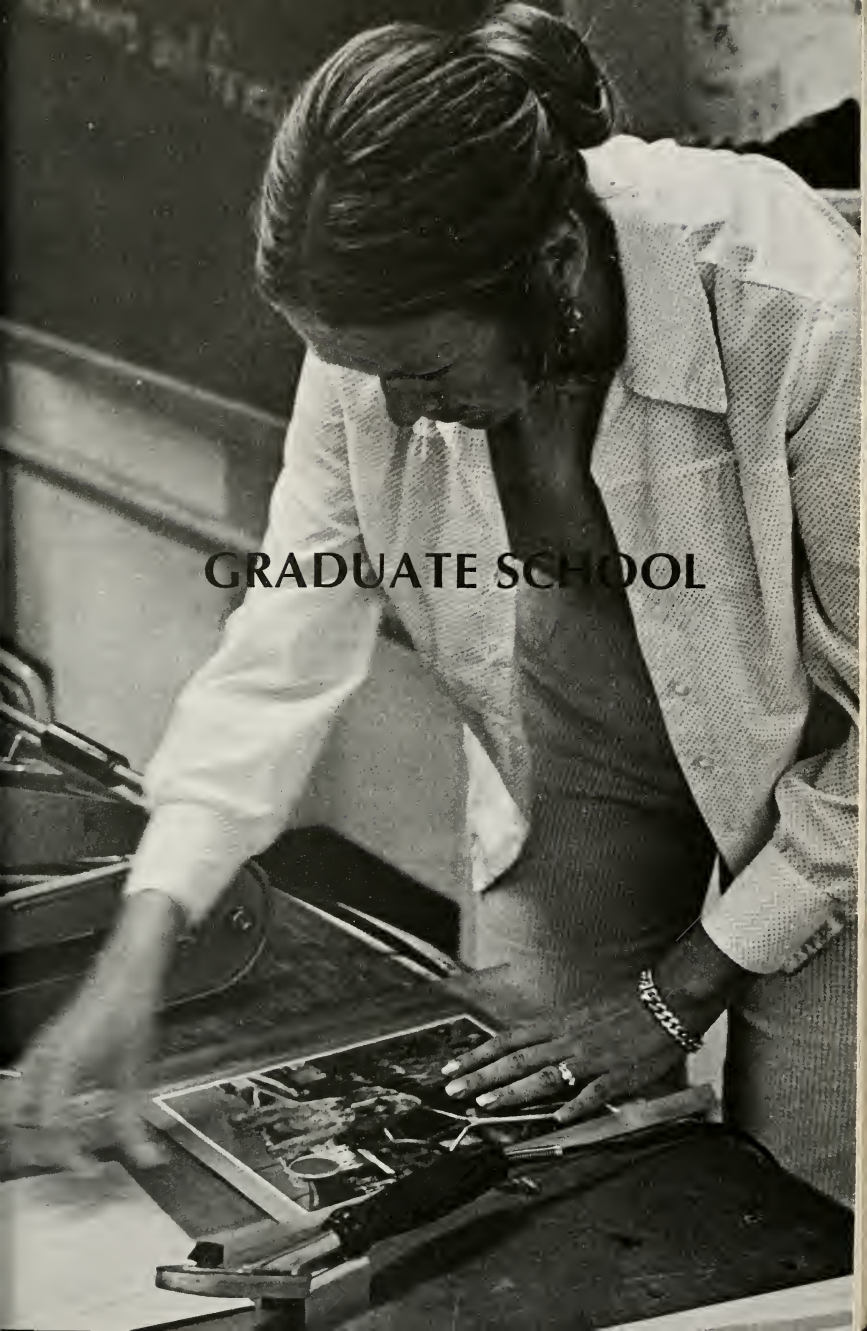
January 22, Saturday	Graduate Registration
January 23, Sunday	Dormitories Open
January 24, Monday	Orientation and Counseling
January 25, Tuesday	Registration (undergraduate)
January 26, Wednesday	Classes Begin
February 5, Saturday	Last Day to Add Class or Apply for May Graduation
March 18, Saturday	Mid-Semester Grade Reports
March 19 (4 pm)-27	Spring Vacation
March 27, Sunday	Dormitories Re-open
March 28, Monday	Classes Resume
April 2, Saturday	Last Day to Drop or Cr/NCr
April 8, Friday	Good Friday Vacation
April 30, Saturday	Graduate School Comprehensives
May 5, Thursday	Honors Day
May 12, Thursday	Grades Due for May Graduates
May 15, Sunday	Commencement
May 16-18	Final Examinations
May 18, Wednesday	Last Day of Undergraduate Classes
May 19, Thursday	Dormitories Close
Off-Campus Intersession-	
May 18-June 3	Field Work and Experiential Education

Summer Session 1977, First Term

June 5, Sunday	Dormitories Open
June 6, Monday	Registration
June 7, Tuesday	Classes Begin
June 9, Thursday	Last Day to Register and Apply for August Graduation
July 1, Friday	Last Day to Drop a Course
July 4, Monday	Vacation Day
July 8, Friday	Term Ends

Summer Session 1977, Second Term

July 11, Monday	Registration
July 12, Tuesday	Classes Begin
July 14, Thursday	Last Day to Register
August 5, Friday	Last Day to Drop a Course
August 11, Thursday	Last Day of Class
August 12, Friday	Commencement



GRADUATE SCHOOL

Few professions carry greater responsibility than that of teaching. In a very special way, teachers are the guardians of civilization.

Patricia B. Perry
Assistant Vice President
for Graduate Affairs

The Union College Graduate School program is accredited by the Southern Association of Colleges and Schools and is approved by the State Department of Education of the Commonwealth of Kentucky.

The Graduate School offers the Master of Arts in Education degree with programs in the following areas: elementary education, reading specialist, kindergarten, English, general education, health, social studies, science, elementary school principalship, and secondary school principalship. Holders of this degree are qualified for the Standard Certificate and Rank II in Kentucky and for comparable certification in other states. The Graduate school offers the Fifth Year Program for the renewal of the Kentucky Provisional Certificate.

In addition, the Graduate School is approved by the Kentucky State Department of Education to offer the forty-five semester hour programs leading to certification as Elementary and Secondary School Principals. Consortia arrangements have been made with several of the state universities in Kentucky and are now being planned with other universities whereby graduate students who have completed the forty-five semester hour programs leading to certification as a principal may transfer to these institutions and complete the requirements for the Rank I program without loss of credit or time. Further details on these programs may be obtained in the Office of Graduate Affairs.

The Graduate Program at Union is designed primarily to provide advanced training for in-service teachers in the geographic area of the college. In addition to its regular academic year for the full-time graduate students, it provides summer sessions, Saturday classes, evening classes, extension classes, internships, field programs for research and study, and school-community assistance in solving school-connected problems.

Organization for Graduate Studies — The Graduate Studies Program has a Graduate Faculty, a Graduate Council, and an Assistant Vice President for Graduate Affairs. The Graduate Council determines the policies, programs, curricula, and membership in the Graduate Faculty and in the graduate student body.

Types of Graduate Students—Graduate courses are open to: (1) students who enter and become candidates for the degree Master of Arts in Education; (2) students who are interested in the fifth year program for renewal of the provisional certificate to teach; (3) students with baccalaureate degrees who wish to broaden their education without reference to a graduate degree, and (4) students with or without a graduate degree who are interested in meeting the requirements for the Elementary or Secondary Principal's Certificate.

Requirements for Admission to the Graduate School—The applicant for admission must possess a baccalaureate degree from a regionally accredited four year institution. The applicant must file an application for admission, a $15.00 admission fee, and two copies of a transcript of all previous college work. For unconditional admission the transcript must show a sufficient and satisfactory undergraduate preparation. The student preparing for the Standard Secondary Certificate may select a major field of interest in which he has at least a minor of twenty-one semester hours. If he does not have at least a minor, he will be required to take work at the undergraduate and/or graduate level sufficient to develop a satisfactory minor.

Admission to the Graduate School is not equivalent to admission to Candidacy.

Graduate Expenses:

Graduate Tuition, per semester hour	40.00
Activity ID card (required for boarding graduate students)	10.00

Summer Session Expenses:

Tuition,	
Graduate, per semester hour	40.00
Room, each 5-week term	45.00
Private Room, each 5-week term	65.00
Board—full week, each 5-week term (21-meal week)	105.00
—short week (Monday breakfast through Friday lunch) each term (14-meal week)	90.00

Admission to Candidacy for the Degree—A student will be admitted to candidacy for the degree Master of Arts in Education only after he has fulfilled the following requirements: (1) shown aptitude during a semester or full summer session (or an equivalent period of residence in Saturday or evening classes) to accomplish work of a graduate character (a minimum of twelve semester hours of graduate work with a grade point average of at least 3.0 fulfills this requirement); (2) possesses a valid teaching certificate based on four years of standard college preparation in the state in which it was issued; (3) satisfied any deficiency in oral or written English that has been reported by any member of the graduate faculty; (4) made written application to the Assistant Vice President for Graduate Affairs for admission to candidacy for the Master of Arts in Education.

Each applicant for candidacy must have an interview with the Assistant Vice President for Graduate Affairs.

Residence—A residence of at least one academic year or its equivalent in summer sessions and/or part-time work is required.

Time Limit—Students should fulfill the requirements for the Master of Arts in Education degree within five years. Extension of time may be granted by the Assistant Vice President for Graduate Affairs, but all degree requirements must be completed within eight consecutive years. Credit earned over a longer period of time cannot be applied toward a degree.

Course Work—Candidates for the degree Master of Arts in Education must complete thirty semester hours of graduate work in courses with a quality point average of 3.0 or better. At least fifteen semester hours must be in courses open only to graduate students (courses numbered 500).

All new graduate students must complete a planned program with the Assistant Vice President for Graduate Affairs or with an advisor appointed by the Assistant Vice President.

The maximum work load for full-time graduate students is 15 semester hours for a fall or spring semester, 6 semester hours per summer term, and 3 semester hours for a January interim. Graduate students engaged in full-time employment may elect up to 6 semester hours for a fall or spring semester, 3 semester hours per summer term, and 3 semester hours for a January interim. With written permission of the employer, the Department Chairman of the major, and the Assistant Vice President for Graduate Affairs, the work load for students who are employed full-time may be increased to 9 semester hours during the fall and spring semester.

Not more than six semester hours earned in a different but recognized institution may be transferred and credited to the Master of Arts in Education degree, provided that the work was completed in a recognized graduate school, is appropriate to the student's planned program, carries a grade of at least B, and provided that acceptance of transfer credit does not reduce the minimum period of one academic year at Union College.

No credit toward a Master of Arts in Education degree may be earned by correspondence.

Thesis—While the thesis is not required in any program leading to the degree, students with special research interests are encouraged to consider a thesis.

Comprehensive Examination—The candidate will be required to demonstrate his professional growth through a written examination covering his program area. The examination may be taken as scheduled during the semester that the student is completing 18 semester hours of graduate work.

Commencement—Candidates for the degree are expected to be present at commencement to receive the degree in person unless excused in writing by the Assistant Vice President for Graduate Affairs at least two weeks prior to commencement. Such candidates must also pay an *in absentia* fee of $10.00.

ELEMENTARY EDUCATION PROGRAM

This program leads to Standard Elementary Certification and Rank II.

I. PROFESSIONAL EDUCATION 9 semester hours

To be selected from the following but must include Education 500 or 572 and Education 520 or 530: Education 441G, 500, 501, 502, 520, 530, 550, 572, 510.

II. SPECIALIZATION COMPONENT **12 semester hours**

These courses must be selected from outside the field of education to strengthen the specialization of the elementary teacher and/or to further develop the general education background. The following courses are suggested: General Science 569, 571, 572; Math 531, 532; Health 451G, 582; Sociology 511; Psychology 431G.

III. ELECTIVES **9 semester hours**

Select these courses to strengthen your teacher preparation. Students who have decided to continue their preparation in administration should use these electives to get a better foundation in the behavioral sciences. Education 503 is strongly recommended.

KINDERGARTEN PROGRAM

This program leads to Standard Elementary Certification, Rank II, and Kindergarten endorsement.

I. PROFESSIONAL EDUCATION **9 semester hours**

To be selected from the following but must include Education 500 *or* 572 and Education 520 or 530: Education 441G, 500, 501, 502, 530, 520, 550, 572, 510.

II. KINDERGARTEN COMPONENT **12 semester hours**

Education 540, 542, and 545

III. ELECTIVES **9 semester**

These courses must be selected from I above or from the following: English 401G, 421G; Psychology 431G, 460G, 470G, 452G, 411G; Sociology 511.

READING SPECIALIST PROGRAM

This program leads to Standard Elementary or Secondary Certification, Rank II, and Reading Specialist endorsement.

I. SPECIALIZATION COMPONENT **12 semester hours**

Education 530, 532, 535, and Psychology 525.

II. COURSES FOR THE READING SPECIALIST **12 semester hours**

To be selected from the following courses: Education 441G*, 582, English 421G, 401G, Psychology 411G*, 470G*.

III. PROFESSIONAL EDUCATION **6 semester hours**

These courses must be selected from II above or from the following: Education 401G, 441G*, 500*, 501*, 510, 502*, 503, 504, 550*, 572*, Sociology 511*.

*AT LEAST NINE SEMESTER HOURS *MUST* BE SELECTED FROM THE COURSES MARKED WITH AN ASTERISK. ALL STUDENTS MUST TAKE EDUCATION 500 *or* 572 AS PART OF THIS REQUIREMENT.

HEALTH PROGRAM

This program leads to Standard Secondary Certification and Rank II.

I. PROFESSIONAL EDUCATION **9 semester hours**

To be selected from the following but *must* include Education 500 *or* 572: Education 441G, 500, 501, 502, 550, 572, 510.

II. HEALTH COMPONENT **12 semester hours**

To be selected from the following: Health 411G, 421G, 451G, 475G, 511, 541, 551, 582, 595.

III. ELECTIVES **9 semester hours**

These courses may be selected from I or II above. Students who have decided to continue their preparation in administration should use these electives to get a better foundation in the behavioral sciences.

ENGLISH PROGRAM

This program leads to Standard Secondary Certification and Rank II.

I. PROFESSIONAL EDUCATION **9 semester hours**

To be selected from the following courses but must include 500 *or* 572: Education 441G, 500, 501, 502, 550, 572, 510.

II. ENGLISH COMPONENT **12 semester hours**

Education 530 *or* 520 is specifically required. Students must have the prior approval of their graduate professor in the selection of these courses.

III. ELECTIVES **9 semester hours**

These courses may be selected from I or II above. Students who have decided to continue their preparation in administration should use these electives to get a better foundation in the behavioral sciences.

SOCIAL STUDIES PROGRAM

This program leads to Standard Secondary Certification and Rank II.

I. PROFESSIONAL EDUCATION **9 semester hours**

To be selected from the following courses but must include 500 *or* 572; Education 441G, 500, 501, 502, 550, 572, 510.

II. SOCIAL STUDIES COMPONENT **12 semester hours**

Students must have prior approval of their graduate professor in the selection of these courses.

III. ELECTIVES **9 semester hours**

Courses may be selected from I or II above. Students who have decided to continue their preparation in administration should use these electives to get a better foundation in the behavioral sciences.

SCIENCE PROGRAM

This program leads to Standard Secondary Certification and Rank II.

I. PROFESSIONAL EDUCATION **9 semester hours**

To be selected from the following but *must* include Education 500 *or* 572: Education 441G, 500, 501, 502, 550, 572, 510.

II. SCIENCE COMPONENT **12 semester hours**

These courses should be selected to strengthen the undergraduate specialization of the teacher.

III. ELECTIVES **9 semester hours**

These courses may be selected from I or II above. Students who have decided to continue their preparation in administration should use these electives to get a better foundation in the behavioral sciences.

GENERAL EDUCATION PROGRAM

This program leads to Standard Secondary Certification and Rank II.

I. PROFESSIONAL EDUCATION **9 semester hours**

To be selected from the following courses but *must* include 500 *or* 572: Education 441G, 500, 501, 502, 550, 572, 510.

II. NON-PROFESSIONAL COMPONENT **12 semester hours**

These courses must be selected outside the field of education and should be from areas that will strengthen the academic specialization of the secondary teacher and/or to further develop the general education background.

III. ELECTIVES **9 semester hours**

Courses may be selected from I or II above. Students who have decided to continue their preparation in administration should use these electives to get a better foundation in the behavioral sciences.

THE ELEMENTARY SCHOOL PRINCIPAL'S PROGRAM

This program leads to Standard Elementary Certification, Rank II, and Elementary Principal's endorsement. (Three years of successful experience are required prior to the issuance of the principal's endorsement.)

I. PROFESSIONAL EDUCATION **9 semester hours**

Education 530 or Education 520 and 572. The remaining course must be selected from the following: Education 501, 502, 550, 510.

II. SPECIALIZATION COMPONENT **12 semester hours**

Psychology 411G, Sociology 511. The remaining hours of non-education should be taken to strengthen the general education background.

III. ELECTIVES **9 semester hours**

To be selected from the following: Education 401G, 441G, 503, 555E, 571, 575.

STUDENTS MEETING THE REQUIREMENTS LISTED ABOVE WILL BE ELIGIBLE FOR THE STANDARD ELEMENTARY CERTIFICATE AND MASTER OF ARTS IN EDUCATION DEGREE. ALL COURSES LISTED ABOVE (45 semester hours) MUST BE COMPLETED FOR THE PRINCIPALSHIP ENDORSEMENT. EDUCATION 510 IS REQUIRED ONLY FOR TENNESSEE PRINCIPALS.

THE SECONDARY SCHOOL PRINCIPAL'S PROGRAM

This program leads to Standard Secondary Certification, Rank II, and Secondary Principal's endorsement. (Three years of successful teaching experience are required prior to the issuance of the principal's endorsement.)

I. PROFESIONAL EDUCATION **9 semester hours**

Education 572 and the remaining hours must be selected from the following courses: Education 501, 502, 550, 510.

II. SPECIALIZATION COMPONENT **12 semester hours**

Psychology 411G and Sociology 511. The remaining hours of non-education should be selected to strengthen the general education background.

III. ELECTIVES **9 semester hours**

To be selected from the following: Education 401G, 441G, 504, 555S, 571, 575, 582.

STUDENTS MEETING THE REQUIREMENTS LISTED ABOVE WILL BE ELIGIBLE FOR THE STANDARD SECONDARY CERTIFICATE AND MASTER OF ARTS IN EDUCATION DEGREE. ALL COURSES LISTED ABOVE (45 semester hours) MUST BE COMPLETED FOR THE PRINCIPALSHIP ENDORSEMENT. EDUCATION 510 IS REQUIRED ONLY FOR TENNESSEE PRINCIPALS.

Fifth Year Program for Renewal of Provisional Teaching Certificates—All new provisional teaching certificates now issued in Kentucky on the basis of a four-year program and a bachelor's degree are valid for an initial period of ten years and shall be renewed upon "completion of a planned fifth year program of college work." The fifth year program is a mandatory requirement for all teachers,

is available to all teachers, and will be planned appropriate to the needs of their respective teaching assignments. It is understood that the teachers involved are certified professionals who have already completed one teacher education program. They will not be subjected to further academic hurdles or screening processes, but will be continuously upgraded on the job through this program.

The following plans will satisfy the planned fifth year requirement for the renewal of the provisional teaching certificates and shall qualify a teacher for Rank II classification under the Foundation Law.

Plan I The completion of the requirements of the degree Master of Arts in Education at Union College.

Plan II The completion of a planned fifth year program in accordance with the following guidelines:

A. The fifth year program shall be planned individually with each applicant by the Assistant Vice President for Graduate Affairs.

B. The fifth year program shall consist of thirty-two semester hours credit with an academic standing of no less than 2.25. At least eighteen semester hours must be earned at Union College in residence. At least twelve semester hours shall be graduate level course work. At least twelve semester hours shall be in professional education. At least twelve semester hours shall be from non-professional academic disciplines.

C. Credit earned by correspondence shall not apply toward the fifth year program.

Courses of Instruction—Courses numbered 500 and above are open only to graduate students. All courses numbered in the 400's and followed by "G" are open to upper division and graduate students. At least 15 semester hours in the program leading to the M.A. in Education must be 500 level courses.

All proposals for independent study must be approved by the Assistant Vice President for Graduate Affairs. It is the student's responsibility to work with a professor in planing the course of study and to present the proposal for approval no later than three weeks prior to the beginning of the semester during which the work is to be accomplished.

SPECIAL EDUCATION

A program which leads to a M.A. in Education with emphasis in Special Education —Learning and Behavior Disorders is presently being developed. Recipients of this degree will qualify for a Standard Certificate, Rank II, and Special Education endorsement in Learning and Behavior Disorders.

COURSE NUMBERING SYSTEM

Courses numbered 400G are open to upper classmen and graduate students. 500 level courses are open only to graduate students.

At least 15 semester hours must be in courses open only to graduate students.

The following symbols indicate the semester the course will be offered on campus: F—Fall, S—Spring, SUM—Summer.

INTERDEPARTMENTAL NUMBERS

Some special numbers are reserved for specific types of courses or studies. They may be used in any department although they are not shown in the following pages under the specific listings.

581 "Special Topics" courses—classes developed on a one-time, or experimental basis, or a special innovative class.

582 Special workshops, credit or non-credit.

583 Television courses through Kentucky Educational Television Network

595 Independent Study—individual research on approved topics not found in traditional courses. May be repeated on different topics.

599 Graduate Thesis.

DIV[illegible] PROC[illegible]S AND
[illegible] ESC[illegible]ONS

"Anatole France said, 'The whole art of teaching is only the art of awakening the natural curiosity of young minds.' We in education have a responsibility to young people to nurture curiosity, direct interest and sharpen appetites for information about the world around them."

Donald L. Calitri,
Chairman of the Division of Applied Science

Division of Applied Sciences

Donald L. Calitri, *Chairman*

DEPARTMENT OF EDUCATION

H. Warren Robbins, *Department Head*

Education 401G. Introduction to Counseling and Guidance. (F) *Three hours*
Educational, sociological, and psychological foundations of counseling and guidance in schools, colleges and related service oriented agencies. Essential counseling and guidance services, policies, practice and procedures.

Education 440G. Introduction to Early Childhood Education. (SUM) *Three hours*
Survey of the physical, emotional, mental, and psychological development of the child under six, and the role of the kindergarten teachers in working with such a child.

Education 441G. Measurement and Evaluation. (S, SUM) *Three hours*
Instruments and techniques for evaluating abilities, aptitudes, personality traits, and interests will be examined and teacher-made evaluative instruments will be given special emphasis. Application of test results to vocational and educational guidance is to be stressed.

Education 500. Research and Current Literature in Education. (F, SUM) *Three hours*
Review of research findings in current literature. Half of the time to be devoted to techniques in research.

Education 501. History and Philosophy of Education. (F, S) *Three hours*
Education in the United States. An analysis of the growth of various educational philosophies and the relation of these to modern educational practice.

Education 502. Curriculum Theory and Development. (S, SUM) *Three hours*
Curricula organization, materials, and methods. Techniques for evaluating and constructing curricula.

Education 503. Elementary School Curriculum. (F, SUM) *Three hours*
Curricular organization, materials, and methods currently used in elementary schools. Techniques for evaluating and constructing curricula.

Education 504. Secondary School Curriculum. (S, SUM) *Three hours*
Curricula organization, materials, and methods currently used in secondary schools. Techniques for evaluating and constructing curricula.

Education 510. Basic Statistics (S) *Three hours*
Designed for aiding Elementary and Secondary school teachers in their understanding and use of elementary statistical terminology and procedures. A limited set of statistical concepts useful in analyzing data from published research is presented as part of the course.

Education 520. Techniques and Materials for Classroom Reading Instruction (S, SUM) *Three hours*
A foundation course which includes a general review of the following reading skills: Word recognition, comprehension, and fluency. Also, an in-depth study of the various approaches to teaching reading will be included. Students will become familiar with various techniques of instruction, the organization of the reading program, and a variety of reading materials. Simple methods of diagnosis are discussed.

Education 530. Diagnostic and Remedial Procedures in Reading. (SUM) *Three hours*
Current research findings in diagnostic and remedial procedures in reading. Techniques for applying diagnostic instruments for locating causes of serious reading deficiencies are developed along with suggested remedial procedures.

Education 532. Techniques and Materials for Remedial Reading. (SUM) *Three hours*
Techniques and materials appropriate to the correction of reading difficulties. *Prerequisite:* Education 530.

Education 535. Practicum in Teaching Reading with Clinic. (SUM) *Three hours*

Education 542. Fundamentals of Kindergarten Education. (SUM) *Three hours*
This course focuses primarily on kindergarten curriculum, materials, organization of the kindergarten program, creative experiences for the pre-school child, parent education and home visitation, understanding of families, community resources, planning learning experiences, and evaluation of pupil programs and progress. Direct observation and participation in the kindergarten setting.

Education 545. Practicum in Kindergarten Education. (SUM) *Six hours*
This course offers direct, guided, supervised experiences with kindergarten children under the supervision of a qualified classroom teacher. This course also may be taken at the undergraduate level as part of the required Supervised Student Teaching.

Education 550. Improvement of Instruction Through Supervision. (S, SUM) *Three hours*
Democratic school procedures and the methods for improving instruction, evaluation of means, methods, and results of action.

Education 555. The Elementary School Principal. (F, SUM) *Three hours*
An analysis of the elementary school building unit as a sub-system within a larger complex organization. Special emphasis on the changes in the role of the elementary school principal as a result of changes in society and in the schools.

Education 556. The Secondary School Principal. (F, SUM) *Three hours*
An analysis of the secondary school building unit as a sub-system within a larger complex organization. Special emphasis on the changes in the role of the secondary school principal as a result of changes in society and in the schools.

Education 560. Supervision of Student Teaching. (F) *Three hours*
Experiences deemed necessary for developing students into effective teachers are considered, with attention to participation in teacher-student conferences and planning and executing a work program. *Prerequisite:* One year of teaching experience or consent of the instructor. Even years only.

Education 561. Internship for the Supervising Teacher. (S) *Two-four hours*
A followup course for Education 560, primarily in the field with part time on the campus in seminars, reports of action research with and about student teaching, honors reading, and evaluation. Open only to those who have had Education 560 and who have a student teacher during the course. Even years only.

Education 571. School Organization and Administration. (F, SUM) *Three hours*
Organization of the modern public shcool, an understanding of such problems as staff-teacher relationships, program of studies, teacher records and reports, personnel and public relations, utilization of teacher time and of physical facilities.

Education 572. Methods of Educational Research. (S, SUM) *Three hours*
Types of research, selection of problems, collection and classification of data; organization, presentation, and interpretation of materials.

Education 575. Seminar in Administration. (F, S) *Three hours*
A total of 90 clock hours in a practicum situation under a qualified administrator in a public school is required with a written record of experiences. A seminar at end of practicum held on campus. *Prerequisite:* Education 555 or 556.

Education 577. Television and other Educational Media. (SUM) *Three hours*
Gives practice in operating educational media and construction of classroom materials. Emphasis given to educational television use in the classroom.

Education 595. Graduate Independent Study. (by arrangement) *Three hours*
Guided study and research toward the solution of specific educational problems encountered by students.

Education 599. Thesis. (by arrangement) *Six hours*

SPECIAL EDUCATION

Special Education 463G. (S) *Three hours*
Speech and Language Disorders. Etiology and symptomatology of speech and language disorders; therapeutic methods.

Special Education 465G. (F) *Three hours*
Environmental Designs Systems. Principles of environmental design control systems for school age children; alternative methods of classroom management utilizing operant methods.

Special Education 470G. (S) *Three hours*
Educational Assessment of Children with Learning and Behavior Disorders. Administration and interpretation of diagnostic instruments; assessment of learning and behavior traits of children with learning problems.

Special Education 471G. (S) *Three hours*
Prescriptive Teaching for Children with Learning and Behavior Disorders. The designing, implementation and evaluation of individualized programs based upon the educationally relevant characteristics of children with learning and behavior disorders.

DEPARTMENT OF HEALTH AND PHYSICAL EDUCATION

Paul S. Moore, *Department Head*

Health 411G. Health Education in the Secondary School. (S) *Three hours*
The experiences, activities, and instruction of secondary students that lead to intelligent self-direction of health behavior.

Health 421G. Community Health. (F) *Three hours*
The social and cultural factors, the physical environment, and the health agencies and services as they relate to the health of the community.

Health 451G. School and Community Health Workshop. (SUM) *Three hours*
Reveals the relationship needed between the school and community to promote the total health of the population. Speakers are secured from official agencies, voluntary agencies, professional agencies, sponsored agencies, and other colleges. Small groups are utilized for discussion, field trips, and study through audio-visual aids.

Health 475G. Critical Areas in Health. (S) *Three hours*
Specific health problems confronting society today with particular reference to secondary age students.

Health 511. The School Health Program. (F) *Three hours*
Administrative arrangements found in school health programs and the utilization of administrative techniques and school personnel in conducting an efficient health program.

Health 541. Scientific Foundations of Health Education. (S) *Three hours*
A study of the scientific aspects of health as they relate to personal, family, and community health.

Health 551. Readings. (F) *Three hours*
A course enabling the student to research the literature in the area of health, not only to increase his basic knowledge, but to acquaint him with current trends and issues.

Health 582. Safety Workshop. (SUM) *Three hours*
Accident problems in the home, in the school, at work, and on the highways are discussed with the purpose of being able to influence those who teach by preparing them in the various areas of safety. Groups specialized in a variety of safety areas, such as National Safety Council, American Red Cross, Bureau of Mines, and Kentucky State Police will be utilized.

Health 595. Independent Study. (by arrangement) *Three hours*
Independent study in the field of health. Could include practical field experiences.

Physical Education 420G. Adaptive Physical Education. (S) *Three hours*
Health conditions which require the physical education and recreation program to be adapted to meet the special needs of individuals with handicapping conditions.

"Studies in the humanities are vital in dealing with present-day problems. Knowledge of the humanities sharpens moral consciousness, fosters logical modes of thought, and leads to increased recognition of fundamental truths."

Allan E. Green,
Chairman of the Division of Humanities

Division of Humanities

Allan E. Green, *Chairman*

DEPARTMENT OF LANGUAGES

W. Gordon Marigold, *Department Head*

English 401G. Modern Grammar. (S, SUM) *Three hours*
A survey of modern approaches to the study of language beginning with the structuralist view of linguistic analysis through the theories of generative grammar to the most recent developments in generative semantics. Considerable attention will be paid to the possibilities of practical applications of linguistic theory.
Even years only.

English 402G. Advanced Composition. (on demand) *Three hours*
For the student who wishes to become a more competent writer. Research papers, factual narratives, argumentation, and "creative" writing are assigned according to the needs and aptitude of the student.

English 421G. History of the English Language. (F, SUM) *Three hours*
A study of the origins and development of the English language from Anglo-Saxon times to the present. Supplementary readings in early and medieval English history with emphasis on the effects of historical events on language change. Odd years only.

English 490G. Composition for Teachers of English. (on demand) *Three hours*
Designed to train teachers of secondary school English composition and to indirectly improve the writing of their students. The instructor will utilize the contributions of his colleagues.

English 521. Advanced Study of English Literature, 500-1700. (SUM) *Three to nine hours*
Intensive study of some phase of English literature within this period. This course may be taken more than once providing that the course content is different. The class schedule will designate the specific content covered. Even years only.

English 522. Advanced Study of English Literature, 1700-Present. (SUM) *Three to nine hours*
Intensive study of some phase of English literature within this period. This course may be taken more than once providing that the course content is different. The class schedule will designate the specific content covered. Odd years only.

English 541. Advanced Study of American Literature, 1600-1860. (SUM) *Three to nine hours*
Intensive study of some phase of American literature within this period. This course may be taken more than once providing that the course content is different. The class schedule will designate the specific content covered. Even years only.

English 542. Advanced Study of American Literature, 1860-Present. (SUM) *Three to nine hours*
Intensive study of some phase of American literature within this period. This course may be taken more than once providing that the course content is different. The class schedule will designate the specific content covered. Odd years only.

English 552. Advanced Study in Linguistics. (S) *Three to nine hours*
Intensive study of some phase of linguistics depending on the needs and interests of the student. This course may be taken more than once providing that the course content is different. The class schedule will designate the specific content covered. Odd years only.

English 595. Independent Study in English (by arrangement) *Three hours*
Independent study or research on an approved topic. May be repeated for credit.

"I believe that students should be acquainted with the ways scientists think and work; the questions they ask, the methods they use to seek answers, and how the significance of their work is determined. The teaching of science must not be the mere dissemination of 'textbook facts', but must be enriched with perspectives as to how concepts develop."

Wendell B. Kringen,
Acting Chairman of the Division of Natural Science

Division of Natural Sciences

Wendell B. Kringen, *Acting Chairman*

Math 531. Topics in Modern Math for Elementary Teachers (SUM) *Three hours*
A study from a theoretical viewpoint of some topics in mathematics that are taught in elementary school. The course will begin with a study of logic and include topics selected from sets; arithmetical operations on the whole numbers, the integers, rational numbers and real numbers; numeration systems; some elementary number theory; measurement; other topics in informal geometry. This course is the required course for a graduate student wishing endorsement of his high school certificate. Credit will not be granted for this course to a student who has completed both Math 203 and 204.

Math 523. Modern Math Laboratory (SUM) *Three hours*
An active involvement in laboratory experiments with multibase blocks, sets, Cuisenaire rods, geoboards, etc.; development of skills in the production and use of place value charts, math balance, fraction bars, games, etc.; creation of a mathematics learning center for the classroom along with the appropriate activity cards for each module. *Prerequisite:* Math 531, or Math 203, 204.

General Science 401G. Science: Concepts, Processes, and Inquiry (S) *Three hours*
The student will examine the processes of science such as collecting data, measuring, predicting, formulating hypotheses, experimenting, etc. With the laboratory materials from the new science programs, he will explore their use in teaching children these processes. As materials from such programs as ESS, SCIS, IME, IIS, ISCS, PSSC, PHYSICS, CHEMS., etc., are used, the basic concepts as well as content of science will be reviewed. The inquiry approach to teaching science will be stressed along with individualized instruction, learning theory, laboratory equipment use (commercial and homemade) and multimedia instruction.

General Science 571-572. Aerospace Workshop (SUM) *Three hours each*
A workshop for elementary school teachers offered during the summer session. It is conducted by the Graduate School in cooperation with the National Aeronautics and Space Administration. Lectures and demonstrations will be given by NASA Space Scientists and Astronauts. Topics covered in science that can be applied to the new problems of space include: astronomy, physics, chemistry, earth science, biology, applications of information, audio-visual aids, teaching methods and demonstration. Each student is required to develop a teaching unit on space science suitable for use in the grade or subject he teaches.

General Science 469G. Environmental Semester (SUM) *Six hours*

A course designed for in-service teachers and mature undergraduates with a background or interest in environmental issues. The physical, cultural, ecological, and economic aspects of the environmental issues facing the Southern Appalachians are the highlights. Considerable emphasis will be given to strategies and techniques of environmental education. This is a residence course at the Environmental Education Center, Cumberland Gap National Historical Park.

Biology 595. Research-Investigations. (by arrangement) *Four hours*

An independent research problem in which the student must demonstrate his ability to employ the scientific method in carrying out an original scientific investigation. A typewritten and bound manuscript will be required. An examination may or may not be given, depending on the nature of the problem selected. *Prerequisite:* Permission of the instructor and approval of the head of the department.

"Often in our hurried search for knowledge we become content with facts and information that are transient and circumstantial. While it is important for us to move forward, it is also necessary that we have some quiet hours for reflection. Reflective thought allows time for the synthesis and integration of prior experiences out of which comes understanding. When we have achieved understanding we have acquired knowledge."

Deril K. Mays,
Chairman of the Division of Social Sciences

Division of Social Sciences

Deril K. Mays, *Chairman*

DEPARTMENT OF BEHAVIORAL SCIENCES

Deril K. Mays, *Department Head*

PSYCHOLOGY

Psychology 402G. Counseling Theories and Techniques. (F) *Three hours*
Basic theories, types, and techniques of counseling. Practice in individual and group techniques of interviewing. Permission of the Department Head required.

Psychology 411G. Educational Psychology (F) *Three hours*
Basic concepts related to mental development, appraisal and diagnosis, and learning theory applicable to educational practices.

Psychology 430G. Social Psychology. (S) *Three hours*
Major emphasis is on problems involved in human relations. Designed to help the individual to understand and adjust to group thought and action. Attention is given to recent psychological and sociological research in human relations.

Psychology 431G. Mental Hygiene. (on demand) *Three hours*
Factors determining the development of personality, principles of mental health, and problems involved in the dynamics of human adjustment.

Psychology 452G. Abnormal Psychology. (S) *Three hours*
Mental disorder, changing conceptions of normality, the more common forms of mental disorders, their psychological interpretation, principles of effective mental hygiene, and contemporary approaches to psychotherapy.

Psychology 460G. Theories of Personality. (F, S) *Three hours*
Nature of personality structure and dynamics. Classical psychoanalysis, social psychological, and stimulus-response theories included.

Psychology 461G. History and Systems of Psychology. (on demand) *Three hours*
Origins of psychological thought within science and philosophy, tracing the development of systems and theories with German, British, and American psychology.

Psychology 470G. Theories of Learning. (S) *Three hours*
Basic fundamentals of learning theory as formulated by such theorists as Thorndike, Pavlov, Guthrie, Skinner, and Hull. Attention is given to the empirical support of various theories.

Psychology 525. Psychology of Reading. (SUM) *Three hours*
Theory and applications of learning principles as applied to the reading processes. Major emphasis relates to respondent, operant, and perceptual learning paradigms.

Psychology 595. Independent Study. (by arrangement) *One to three hours*

SOCIOLOGY

Sociology 421G. Rural and Urban Sociology. (F) *Three hours*
Comparative and interrelated study of urban and rural life considering physical, institutional, social and economic factors of modern life in cities and in the countryside.

Sociology 422G. Social Institutions in Appalachia. (F, S) *Three hours*
A theoretical and empirical analysis of the cultural and social characteristics of the Appalachian Region from an institutional point of view.

Sociology 441G. Cultural Anthropology. (S) *Three hours*
Principles and methods of anthropology applied to modern and primitive societies. A cross-cultural survey and analysis of social institutions, religion, art, beliefs, values, and languages of people in industrial and non-industrial societies. A critical analysis of leading theoretical ideas in the field.

Sociology 460G. Sociological Theory. (F) *Three hours*
The major theories which have proved useful in investigating the nature of society are examined as cultural products, ideologies, and scientific models. Special attention is given to major figures such as Comte, Durkheim, Weber, Merton, C. Wright Mills, White, and Sorokin in the emergence and convergence of their theoretical development. Lecture and discussion in a seminar setting.

Sociology 461G. Criminology. (S) *Three hours*
A theoretical and empirical approach to crime and delinquency. A general survey of juvenile delinquency, corrective institutions, and crime prevention programs. Even years only.

Sociology 511. Educational Sociology. (F, S) *Three hours*
Analysis of educational institutions in terms of the interaction of individuals and groups, educational processes, school and community relations, and the function of the educator as an agent of socialization.

Sociology 595. Independent Study. (by arrangement) *One to three hours*

DEPARTMENT OF HISTORY AND POLITICAL SCIENCE

HISTORY

History 442G. Britain in the 20th Century. (S) *Three hours*
The history of Great Britain since 1900. Even years only.

History 446G. History of Russia. (F) *Three hours*
The history of Russia since the 17th century. Odd years only.

History 470G. Recent American History. (S) *Three hours*
Selected topics on the Nation's history since 1900. Even years only.

History 521. American Colonial Culture. (on demand) *Three hours*
The background; travel, everday life, and intellectual pursuits; economic enterprises—capitalism, commerce, household industries; the laborer and colonial craftsman; and frontier agriculture.

History 531. The American Revolutionary Era. (F) *Three hours*
The background of the revolution; Continental Congress and the Confederation at work; internal problems and strife; military and naval events; foreign relations; the road to final independence and peace. Even years only.

History 551. Civil War and Reconstruction. (on demand) *Three hours*
A study of the Civil War and Reconstruction period in American history.

History 595. Independent Study. (by arrangement) *Three hours*

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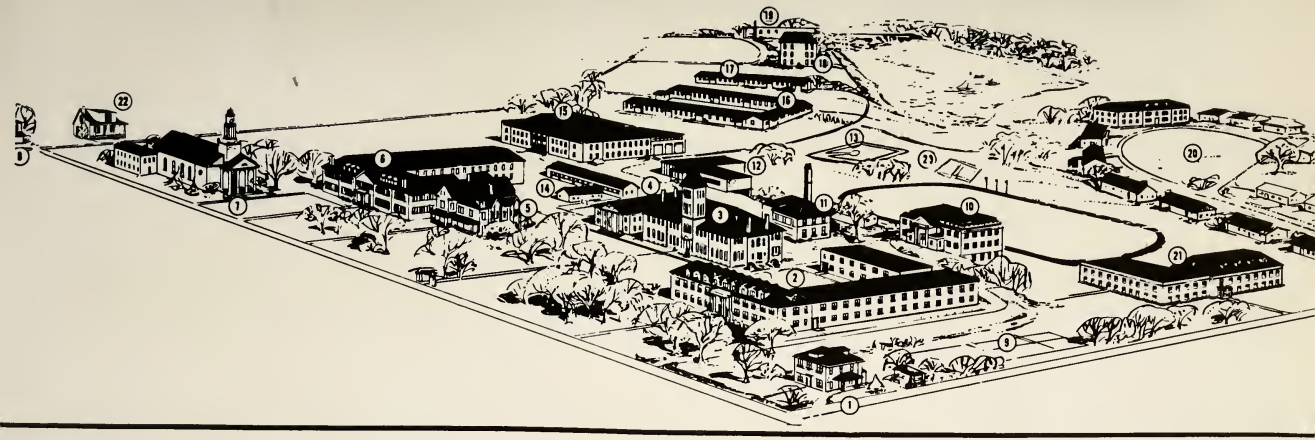

1. Baldwin Place, President's Residence
2. Stevenson Hall, Men's Residence
3. Classroom Building
4. Library
5. Speed Hall, Administration Building
6. Pfeiffer Hall, Women's Residence
7. Conway Boatman Chapel—Fine Arts Building
8. Home Economics Building
9. Tennis Courts
10. Dramatic Arts Center
11. Data Processing
12. Student Center
13. Colonel Sanders Field
14. Religious Life Center
15. Physical Education Building and Swimming Pool
16. College Courts, Married Students Apartments
17. College Courts Addition
18. Lakeside Hall, Men's Residence
19. Bureau of Mines Education Center
20. College Park, Faculty Housing
21. Mahlon Miller Science Center
22. Manchester Street Building
23. Tennis Courts

McFerrin

UNION COLLEGE

IN KENTUCKY

LEGE IN KENTUCKY • UNION COLLEGE IN KENTUCKY • UNION COLLEGE IN KENTUCKY • UNION COLLEGE IN KENTUCKY • UNION COLLEGE IN KENTUCKY • UNION COLLEGE IN KENTUCKY

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Admission to the Graduate School	*Assistant Vice President for Graduate Affairs*
Alumni Affairs	*Director of Alumni Affairs*
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Personal Welfare, Health of Students, Housing	*Dean of Students*
Scholarships, Workships and Loans	*Director of Student Financial Aid*
Transcripts—Academic Records—Veterans Affairs	*Registrar*

LOCATIONS AND TELEPHONES

All offices are located in Speed Hall unless otherwise noted. The telephone number for Union College is (606) 546-4151. The extensions listed will contact you with the appropriate office.

President	Extension 111
Vice President for Academic Affairs	Extension 112
Assistant Vice President for Graduate Affairs	Extension 124
Business Manager and Treasurer	Extension 115
Dean of Students	Extension 118
Office of Public Information	Extension 110
Office of Admissions	Extension 117
Office of Development	Extension 195
Office of Financial Aid	Extension 171
Registrar	Extension 114

Vol. XXXVIII UNION COLLEGE BULLETIN No. 1
March, 1976

PUBLISHED QUARTERLY
UNION COLLEGE
BARBOURVILLE, KENTUCKY 40906

Entered as a second-class matter at the post office at Barbourville, Kentucky, 40906, under Act of Congress, August 24, 1912.

Union College is accredited by the Southern Association of Colleges and Schools, and by the Kentucky Department of Education. Union admits students of any race, color, and national or ethnic origin.

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Mahlon A. Miller,
President of the College

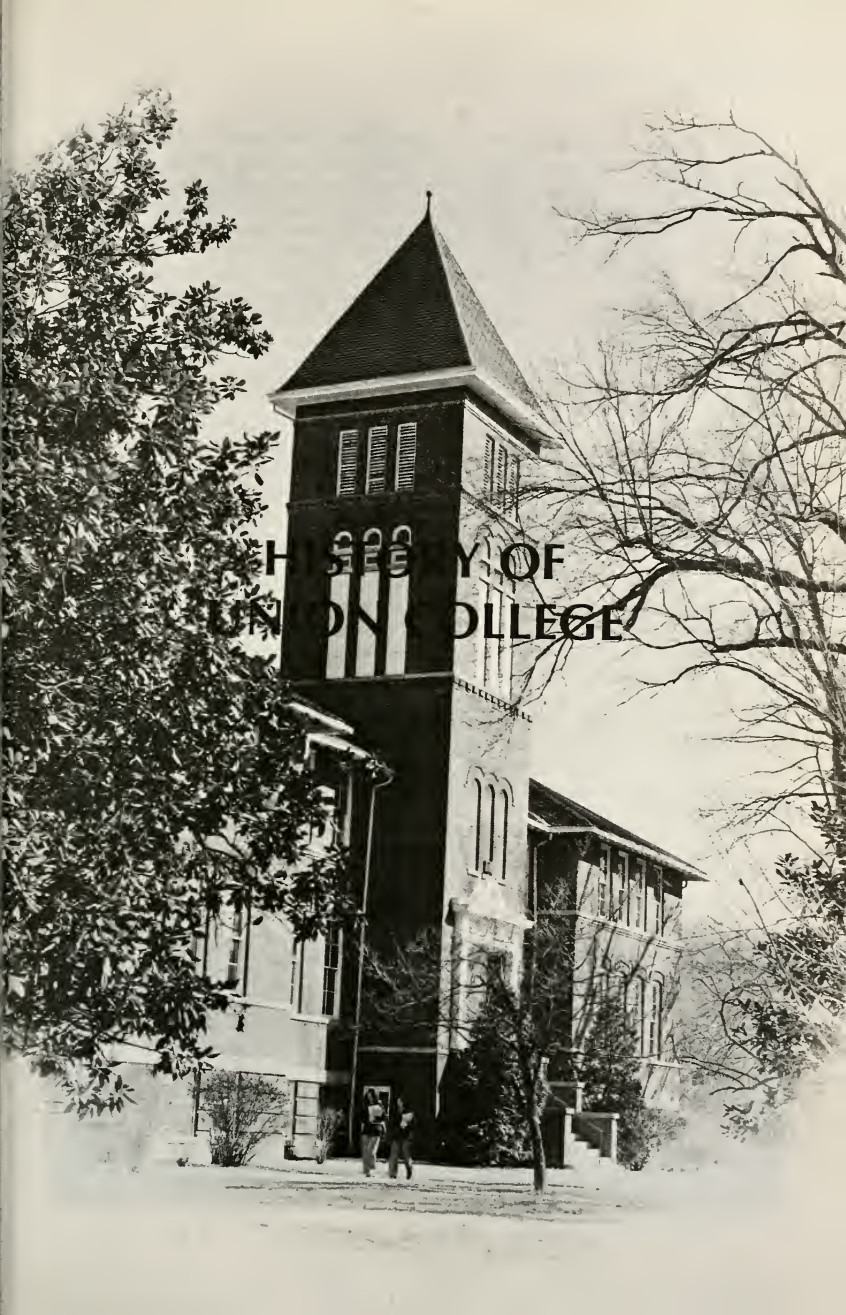
A College With a Mission

Union College, affiliated with The United Methodist Church, is a nonsectarian coeducational institution serving students without regard to race, color, and national or ethnic origin. The college emphasizes stimulating teaching, and a concern for individual needs and strength of character. Classes are small, the curriculum is flexible, opportunities for counseling and guidance are abundant, and widespread student involvement in institutional governance aids in the development of responsible leadership.

While it is recognized that Union College cannot be all things to all people, the institution provides a variety of educational programs. Union College offers the following types of educational alternatives: updated and restructured liberal arts bachelor's degree programs; professional and pre-professional bachelor's degree curricula; Appalachian Regional Studies; occupational-oriented certificate and associate degree programs; master's degree curricula in education; and special non-degree continuing education for upgrading occupational skills and/or personal enrichment.

The institution's primary mission is to help improve the quality of life and living conditions in Appalachia by serving the people of Appalachia. The college offers a variety of quality programs that are attractive to a broad spectrum of students, provides for all students the basis for understanding the distinctive features of Appalachia, provides students with alternative approaches to learning and acquiring a degree, structures the curricula in such a manner as to implement the career ladder concept, assists students in planning and preparing for life and for careers, and delivers services directly to the people of the nearby region.

The campus atmosphere stimulates intellectual curiosity and academic competence, encourages commitment to Christian ideals, and supports the development of the spiritual, social, and physical resources needed to live creatively and wholesomely in a changing world.


HISTORY OF
UNION COLLEGE

Union College was founded in 1879 by a group of progressive citizens of Barbourville who formed a stock company and secured the main part of the present campus. In 1880 the first building was formally opened on the site of what is now known as the Classroom Building.

The college was purchased by the Kentucky Conference of the Methodist Episcopal Church in 1886, and Daniel Stevenson, President of Augusta Collegiate Institute at Augusta, Kentucky, was made President of the reorganized institution. A major bequest from Mrs. Fanny Speed led to the construction of Speed Hall, Stevenson Hall, and the Classroom Building.

The college department was discontinued in 1908 and for eight years the institution was maintained as a Junior College, an academy, and an elementary school. It became a *bona fide* college again in the Presidency of Ezra T. Franklin, who inaugurated a program of development during which the Memorial Gymnasium and a home for the President were built, and the invested funds of the college were materially increased. In 1927 the College was accredited by the University of Kentucky as a four-year college of A grade.

President John O. Gross emphasized the improvement of the curriculum and the building of a strong faculty. His ambition was to see Union College fully accredited. In 1931 it was accredited by the University Senate of the Methodist Episcopal Church, and in 1932 full accreditation was realized when it was made a member of the Southern Association of Colleges and Schools. The Board of Regents of the University of the State of New York placed Union College on its accredited list in 1937. During this administration, land adjacent to the campus was purchased, a maintenance building was erected, and the financial structure was reorganized.

In Conway Boatman's twenty-one years of leadership, the college achieved marked progress in both its educational and plant improvement programs. Seven new buildings were completed and others were enlarged. The curriculum was expanded, endowment funds were increased, and a markedly improved program of faculty salaries and benefits was adopted.

Mahlon A. Miller was elected to the presidency in 1959. In 1960 a Master of Arts in Education degree program was introduced and plant expansion continued with the development of College Park, a faculty residential area, followed by the construction of additional student housing, a physical education building and a student center. The latest addition, a science center, was completed in 1973.

The college has always accepted a special mission to Appalachia, a thrust that is now being strengthened with unique academic programs based on regional characteristics, expanded student financial aid, student community service projects, and new career-oriented curricula. As the college moves toward its centennial, it is expanding and enriching its service to Appalachia while at the same time fulfilling the needs of the many students from other states who come to Union College for an education.

Union College is also accredited by the Kentucky Department of Education.

Location, Campus and Buildings

Union College is located in Barbourville, a residential town of 3,500, on U.S. highway 25E midway between Lexington, Kentucky, and Knoxville, Tennessee. The historic Wilderness Road runs along the eastern edge of the campus. Cumberland Gap National Historical Park, the location of the Union College Environmental Education Center, is thirty miles away. The Doctor Thomas Walker State Park is four miles from the campus and in adjoining counties are the Cumberland Falls State Park, the Levi Jackson State Park, and the Pine Mountain State Park.

The county seat of Knox County, Barbourville is served by Greyhound buses enroute to Knoxville, Lexington, Louisville, and Cincinnati. The London-Corbin Airport, approximately thirty miles from the campus, is served by the Piedmont Airlines.

On one of the most picturesque campuses of the South, Union College is proud of its Georgian colonial buildings. Shaded by overhanging elms, the red brick buildings give the campus a majestic charm of dignity and beauty.

Speed Hall (Administration Building), 1897-1905. A gift from the estate of Mrs. Fanny Speed of Louisville, Ky. Her bequest also partially financed the Classroom Building and Stevenson Hall.

Classroom Building (formerly the Administration Building), 1907.

Stevenson Hall—Men's Dormitory, 1907. Wings added 1956.

Dramatic Arts Center, (formerly Gymnasium), 1919; remodeled 1965.

Baldwin Place, the home of the President, 1925. The gift of Mr. and Mrs. F. E. Baldwin, Elmira, N. Y.

Maintenance Building, 1938, originally equipped by a gift from the estate of Robert Norton, New Albany, Indiana.

Abigail E. Weeks Memorial Library, 1941. Originally furnished by a gift from Mrs. Abbie E. Stewart.

Pfeiffer Hall—Women's Dormitory, 1942. Wing added 1960. The original wing was a gift from the estate of Mr. and Mrs. Henry Pfeiffer of New York City.

Home Economics Building, 1946; remodeled 1966.

Conway Boatman Chapel and Fine Arts Building, 1949.

College Courts—Residences for married students, 1954. Expanded in 1964.

Religious Life Center, 1975.

Physical Education Building, 1964, including the Swimming Pool, 1957.

Lakeside Residence Hall, Men's Dormitory, 1964.

Student Center, 1964.

College Park, 1960. Faculty residential area.

Langford Apartments, 1962. Gifts from the estates of Miss Mary Kyle Dugan and Mrs. Mary Gilbert Langford in memory of Mr. and Mrs. George Langford. Housing for faculty and staff.

Environmental Education Center, Cumberland Gap National Historical Park, Middlesboro, 1970.

Mahlon Miller Science Center, 1973.

CALENDAR 1976-77

Summer Session 1976, First Term

June 6, Sunday	Dormitories open, 8 a.m.; First meal in dining hall, 5 p.m.
June 7, Monday	Registration for first term, 9 a.m.
June 8, Tuesday	Classes begin, 7:30 a.m.
June 10, Thursday	Last day to register for first term and last day to apply for August 1976 graduation
July 2, Friday	Last day to drop a course.
July 9, Friday	First term ends, 4 p.m.

Summer Session 1976, Second Term

July 12, Monday	Registration for second term, 9 a.m.
July 13, Tuesday	Classes begin, 7:30 a.m.
July 15, Thursday	Last day to register for second term.
August 6, Friday	Last day to drop a course.
August 13, Friday	Summer Commencement, 10:30 a.m.; Last meal in dining hall, 12 noon; Dormitories close, 4 p.m.

Fall Semester 1976

August 27, Friday	Administrative Meeting
August 28, Saturday	Faculty Meeting
August 29, Sunday	Dormitories Open
August 29, Sunday	Parents Orientation
August 29, Sunday	New Student Orientation
August 30, Monday	Orientation and Counseling
August 31, Tuesday	Registration (undergraduate)
September 1, Wednesday	Classes Begin
September 4, Saturday	Graduate Registration
September 11, Saturday	Last Day to Add Class or Apply for January Graduation
September 11, Saturday	Record Date for Determination of Fall Credit Load
October 16 (4 pm)-24	Fall Vacation
October 24, Sunday	Dormitories Re-open
October 26, Tuesday	Mid-Semester Grade Reports
November 5, Friday	Founders Day Convocation
November 6, Saturday	Last Day to Drop or Cr/NCr
November 11, Friday	Pre-Registration, January Term
November 25, Thursday	Thanksgiving Vacation
December 4, Saturday	Graduate School Comprehensives
December 15-18	Final Examinations
December 17, Friday	Last Day of Undergraduate Classes
December 18, Saturday	Last Day of Graduate Classes
December 18, Saturday	Dormitories Close

January Interin 1977

January 2, Sunday	Dormitories Open
January 3, Monday	Registration
January 7, Friday	Last Day to Elect Cr/NCr
January 21, Friday	Term Ends

Spring Semester 1977

January 22, Saturday	Graduate Registration
January 23, Sunday	Dormitories Open
January 24, Monday	Orientation and Counseling
January 25, Tuesday	Registration (undergraduate)
January 26, Wednesday	Classes Begin
February 5, Saturday	Last Day to Add Class or Apply for May Graduation
March 18, Saturday	Mid-Semester Grade Reports
March 19 (4 pm)-27	Spring Vacation
March 27, Sunday	Dormitories Re-open
March 28, Monday	Classes Resume
April 2, Saturday	Last Day to Drop or Cr/NCr
April 8, Friday	Good Friday Vacation
April 30, Saturday	Graduate School Comprehensives
May 5, Thursday	Honors Day
May 12, Thursday	Grades Due for May Graduates
May 15, Sunday	Commencement
May 16-18	Final Examinations
May 18, Wednesday	Last Day of Undergraduate Classes
May 19, Thursday	Dormitories Close
Off-Campus Intersession-	
May 18-June 3	Field Work and Experiential Education

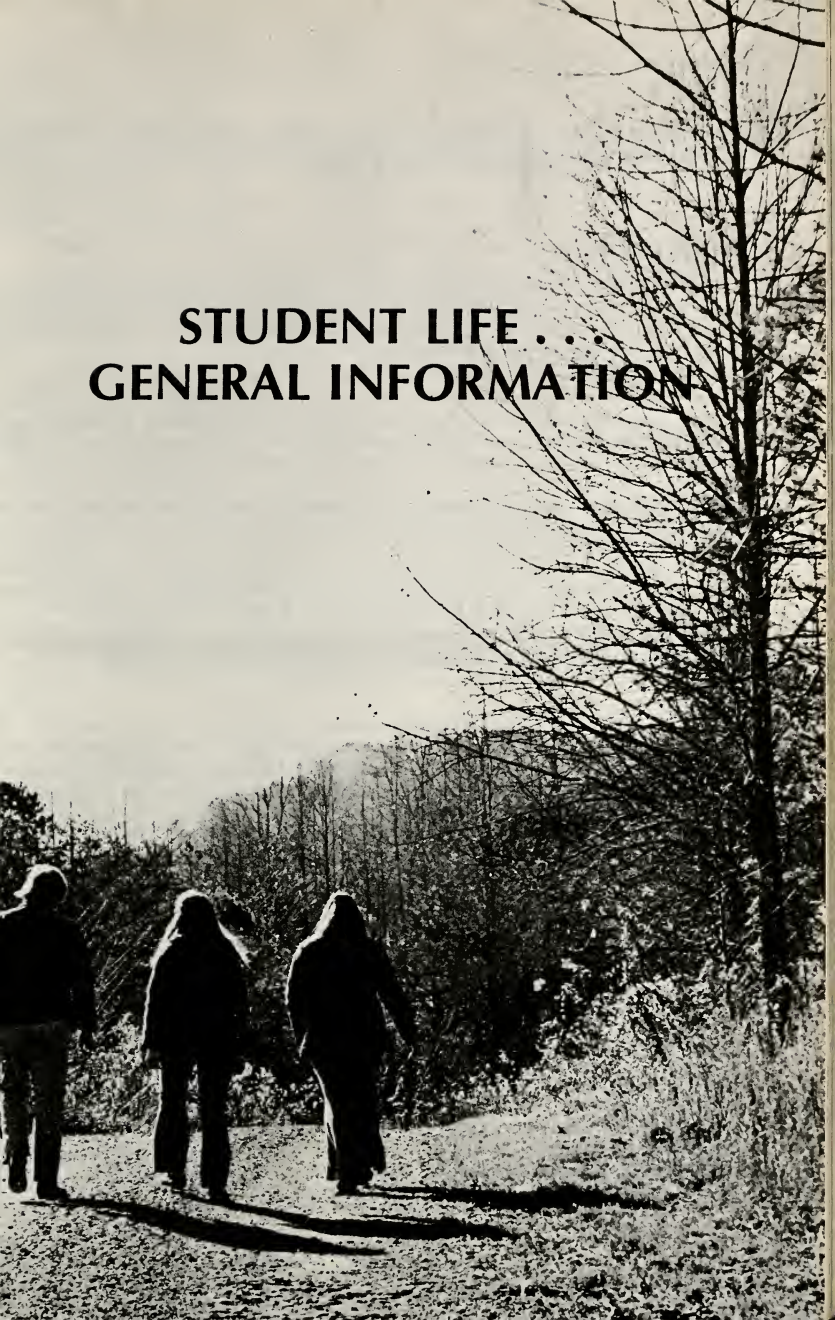
Summer Session 1977, First Term

June 5, Sunday	Dormitories Open
June 6, Monday	Registration
June 7, Tuesday	Classes Begin
June 9, Thursday	Last Day to Register and Apply for August Graduation
July 1, Friday	Last Day to Drop a Course
July 4, Monday	Vacation Day
July 8, Friday	Term Ends

Summer Session 1977, Second Term

July 11, Monday	Registration
July 12, Tuesday	Classes Begin
July 14, Thursday	Last Day to Register
August 5, Friday	Last Day to Drop a Course
August 11, Thursday	Last Day of Class
August 12, Friday	Commencement

STUDENT LIFE . . . GENERAL INFORMATION



In matters of social policy Union College is guided by the Social Creed of The United Methodist Church.

Religious Life

Union College takes seriously its identity as a church-related institution, and is concerned that its students grow in their awareness of the value of a vital Christian faith, as well as in their awareness of academic excellence. In this concern, Union College seeks to be faithful to John Wesley's affirmation that a whole person is one who unites knowledge with vital piety.

Worship and other religious services are held on campus twice weekly, are ecumenical in nature, and utilize the talents of the campus minister and other clergy, faculty and students. A vespers service, a prayer breakfast, and an open-house, which provides a setting for informal discussion of and sharing opinions about issues which are of interest to students who are seeking to grow in their understanding of Christianity, are held weekly. Celebrations of the Lord's Supper are held regularly. In addition, the Religious Life Center, in the heart of the campus, provides a setting for informal worship, study, discussion, and fellowship. The Willson-Gross Lectures and the "Faith and Life Week" seek to bring outstanding speakers to the campus to discuss the Christian faith. The Religious Life Committee, composed of students, faculty, and local clergy, works with the Campus Minister as an advisory group to insure that the religious life programs meet the needs of the students and campus community. From time to time, various individuals, groups, music ensembles, and films are scheduled to enrich both the religious and cultural life of the college community.

Students are encouraged to worship regularly in the church of their choice and to participate in the various denominational and faith-oriented groups on campus and in the community.

Social Life

Students are encouraged to accept every legitimate oportunity to engage in social functions. The faculty emphasizes the value growing out of well-directed social activities. Student organizations, the faculty and local churches make desirable contributions to the promotion of social life. The Director of Student Activities is responsible for the initiation and direction of a comprehensive program of student social and recreational activities. All social functions are subject to rules and regulations of the college.

Concerts of exceptional merit are given throughout the school year by students in the School of Music and by the members of the music faculty, who are all performing artists.

Union College brings to the campus outstanding artists, performers, lecturers and entertainers. Their programs are planned by a Cultural Events Committee and the Student Center Board, and are given during assembly hours and evening performances.

Student Organizations

Students have the opportunity of participating in and developing leadership through a number of campus organizations. Some of these are departmental, some are limited to honor students in their fields, many are open to all interested students. Each has a faculty sponsor and some include faculty in their membership.

Alpha Phi Omega—A service fraternity designed to promote leadership, friendship and service to the campus.

Association of Women Students—An organization to make girls dorm life better and let girls actively participate in college functions through their ideas.

Belle Canto Sorority—A professional sorority to bring unity among the music majors and minors, to provide service to music departments, and to increase the appreciation of music on campus and in the community.

Beta Chi Alpha—A cultural society, in the form of a sorority, which attempts to bring beauty, culture, and art to the campus.

Bridge Club—A club promoting interest and participation in the game of Bridge.

Cheerleaders and Drill Team—An organization to promote school spirit at Union College.

Circle-K International—A service fraternity associated with Kiwanis.

Eta Pi Sigma—An organization to promote fellowship among students interested in history and public affairs.

Gamma Beta Phi—A national honor society promoting scholarship, leadership, and good citizenship at Union College.

Girls Service Sorority—A service sorority designed to assemble Union College women in the spirit of service.

Home Economics Club—Sponsored by the Department of Home Economics and open to any girl interested in the field of home economics.

Iota Sigma Nu—An honor society to provide recognition for honor students by uniting them in an organization which encourages high ideals, promotes diligence in study, and rewards excellence in scholarship.

Milesians—An organization to discuss mutual concerns in the field of philosophy.

Modern Culture Study Group—A group whose purpose is to study modern culture with an emphasis on the dramatic arts, through group discussion, films, readings, and lectures.

Mu Omega Beta—A fraternity promoting fellowship, unity, and service to the college community.

Oxford Club—A preministerial discussion group concerned with problems that arise in the Christian ministry.

Phi Cwens—An honor sorority for sophomore women.

Pi Gamma Mu—A national organization to inspire social service to humanity by an intelligent approach to the solution of social problems.

Pi Upsilon Beta—A fraternity promoting fellowship, unity, and service to college and community.

Playlikers—An organization promoting interest in the theatre.

Psychology Club—A club organized to promote and encourage personal growth and development, and to expend human awareness of one's self, others, and the world we live in.

Stespean—An organization which produces the yearbook.

Student Center Board—A programming board providing social and recreational activities to supplement those planned by other campus agencies.

Student National Education Association—A national preprofessional organization for men and women planning to pursue teaching as a career.

Union College Science Society—An organization to stiumlate interest in the natural sciences.

Union College Society of Social Workers—A group whose purpose is to increase interest in social work, and to provide service to the college and community.

United Methodist Collegiate Action Group—For students interested in Christian fellowship.

General Information

Athletics

Union College is a member of the Kentucky Intercollegiate Athletic Conference and of the National Association of Intercollegiate Athletics. The college promotes athletics for physical development and as a vital part of the program of extracurricular activities. The program emphasizes the protection of the best interests of the student athlete. Union teams are noted for "clean" sport and competitive spirit. Sport for fun and character building is fundamental. In intercollegiate competition the college is represented by varsity teams in basketball, track, swimming, tennis, golf, baseball, and cross country.

Union College sponsors intramural activities in touch football, basketball, free-throwing, horseshoes, badminton, softball, tennis, volleyball, speedball, and field hockey to have a "sports for all" program. The intramural organization is, in general, made up of men's and women's independent teams. The program includes both team and individual sports. No college credit is given for intramurals but everyone is urged to take part.

Publications

Union College Bulletin.—An official quarterly bulltin, one issue of which is the catalog number. This bulletin is sent free on request.

Parents' Quarterly.—A publication to inform parents of activities on campus.

Orange and Black.—A newspaper published by the student body.

Union College Alumnus.—A quarterly bulletin published by the Alumni office.

Stespean.—The yearbook, published annually by the students of the college.

The Library

The Abigail E. Weeks Menorial Library houses a collection of approximately 67,000 volumes. More than 320 periodicals are regularly received, along with indexing services to facilitate their use. It is also a selective depository for U.S. government publications. The stacks are open for use by all students. Regulations governing the use of library materials are available in the library, and freshmen students are given instruction in the use of its facilities. At the Environmental Education Center, there is a special collection of more than 500 volumes of new books on environmental concerns. This collection provides materials for environmental courses on the main campus as well as those at the center. In addition, the college houses a special Lincoln-Civil War collection containing over 500 volumes, a curriculum library in the Department of Education, and a music library with a collection of 3,500 recordings and musical scores.

Health Service

Union College retains a full-time registered nurse, who is on call at all hours, and maintains free infirmary service for brief illnesses. Since the College does not have facilities for taking care of protracted illness, arrangements for hospitalization must be made by the student or his parents. When a physician is needed, the patient may request the college nurse to call one, whose fee is paid by the student. In case of emergency the college reserves the right to employ a physician or to have a student hospitalized without consent of the parents.

During the calendar year, all full-time undergraduate students may secure coverage of an accident and sickness hospitalization plan which is arranged through Mutual of Omaha. All claims under this student insurance plan are placed by the student and the attending physician.

Student Conduct

Each student is expected to conduct himself at all times according to the rules of good society. This obligation includes compliance with Federal, State, and local laws and adherence to college regulations. As members of a free society, students are always free to peacefully and lawfully petition for amendment or modification of the various laws as well as the college regulations. However, the rights of the student body as a whole and the college as an institution of higher education exceed the rights of any individual student or any group of students. Accordingly, not in an attempt to stifle dissent, but rather to perpetuate an environment where the student may peacefully pursue his studies, actions which are disruptive to the normal functions and operations of the college will not be tolerated. Students who are disorderly in conduct, or unmindful of the rights of others, may be required to withdraw from the college.

Union College, as a United Methodist-related institution, supports the Church's stand against the use of alcoholic beverages.

No student shall possess or use alcoholic beverages when on college property or in college-approved facilities off campus, or when away from the campus representing the college in any way, e.g., a participant in or spectator at a college athletic event or other college function. Any student violating this regulation may be required to withdraw from the College.

The sale, possession, or use of stimulant, depressant, narcotic, hallucinogenic or other drugs or substances in violation of the Federal, State, or local laws is prohibited. Any student who illegally sells, possesses, or uses such drugs will be subject to criminal prosecution by the appropriate law enforcement agencies and also may be suspended or expelled. It is the announced policy of Union College to cooperate fully with the various law enforcement officials in the enforcement of the drug laws as with all other laws. A student's lawful use and possession of certain drugs pursuant to a valid prescription from a qualified medical practitioner such as a physician, dentist, or optometrist is, of course, permitted. The college Health Services should be consulted with regard to the use of stimulants which are necessarily illegal drugs since protracted use of these substances may be harmful.

Firearms of any kind are forbidden in the residence halls or on the campus. All weapons must be registered and stored by a resident fellow. Students may be expelled for failing to register firearms.

Gambling in any form is strictly forbidden.

Union College expects good housekeeping from all on-campus resident students. Persons who persist in lack of good housekeeping will be asked to withdraw from residence on the campus. The college reserves the right to enter and inspect the rooms of students at any time.

No student shall engage in disorderly conduct when on college property or in college approved facilities off campus, or when away from the campus representing the college in any way, e.g., a participant in or spectator at a college athletic event or other college function. Any student violating this regulation may be required to withdraw from the College.

Automobiles

At the time of registration for classes, all students who possess automobiles must complete an automobile registration card. Students who wish to park on campus must pay a $2.00 parking fee and affix a Union College permit. Students must meet minimum insurance requirements as set forth by the Commonwealth of Kentucky.

SPECIAL PROGRAMS

Advanced Placement

Students at Union College who have had superior preparation in certain curricular areas have regularly been placed in advanced course sections. In certain cases credit will be given by an examination administered by the Head of the Department. The college will also grant academic credit to those incoming freshmen who have successfully participated in the Advanced Placement Program of the College Entrance Examination Board. Interested students should consult the publication "Advanced Placement Program" of the College Board Advanced Placement Examinations, Box 592, Princeton, N.J., and their High School Guidance Counselors. Further information on the program may be obtained from the Registrar or the Academic Vice President.

Advanced Placement for Veterans

Academic credit is granted to veterans for advanced placement, in accordance with the American Council on Education. Up to 60 semester hours may be granted, on a combined basis, from College Level Examination Program (CLEP) tests, courses approved by the U.S. Armed Forces Institute, credit from service schools, and correspondence and extension courses. Veterans with over one year of active duty are automatically awarded eight semester hours of elective credit toward graduation.

Project AHEAD

Union College has entered into an agreement with the United States Army to participate in Project AHEAD. Under this project, qualified young men and women may enroll at Union at the same time they enlist in the Army, with the Army paying 75% tuition assistance for college credits earned while on active duty.

A Career Planner will be assigned to offer counseling to the soldier/student and to maintain contact with him while he is serving in the Army. The Career Planner advises the soldier of the educational opportunities available at the installation where he is stationed and advises him concerning those courses that will apply to his curriculum at Union College. Once the soldier returns to full-time college life he is entitled to up to 36 months of educational benefits through the Veterans Administration to complete his education.

Union College accepts up to thirty semester hours of CLEP credits, provides eight semester hours of credit for military service, and awards additional credit for approved military training courses.

For more information on Project AHEAD contact your nearest Army representative or the Coordinator of Career Planning at Union College.

January Interim Term

During the January Interim term, special projects and courses are offered, both on and off campus. Students may select certain work-study arrangements, foreign study projects, regular courses, and independent study projects. The tentative schedule for the January Interim is available in the spring, and final decisions and registration take place about October 1. The January Interim is intended to provide students with unusual and challenging opportunities to broaden and further their education.

College for High School Students

Superior high school students, recommended by their Principals, are permitted to take certain college freshman courses in the summer sessions between their junior and senior years in high school and between their graduation and the opening of the regular fall semester. Credit earned in these courses will be recorded after the student has been regularly admitted to college following his graduation from high school. Selected high school students may also elect some courses during their senior year. Special tuition rates are available to such students.

School Social Worker

The college offers a curriculum to prepare students for positions as School Social Workers. The Kentucky Department of Education has approved the curriculum and graduates receive certification. Further information on this program is available from the social work department.

Extension Program

Extension courses will be offered in communities throughout Southeastern Kentucky and nearby communities in Virginia and Tennessee when requested by the school officials or an interested group of prospective students. The college sends a representative to the community to register and counsel with the students. Courses may be on the undergraduate or graduate level and are offered evenings and Saturday mornings.

Summer Session

Union College has two five-week summer terms; classes normally meet five days a week. Some classes and workshops may be of shorter duration.

The work offered in the summer is the same as that offered in the winter semesters. Students may take summer work to accelerate their program or complete college requirements. The requirements for admission are the same as for the regular year.

MACCI

Union College is a member of the Mid Appalachia College Council, Inc., a consortium of twelve colleges. This consortium performs many functions, but there are two of special academic significance which provide unusual opportunities for Union College students.

1. Since 1968, a series of special honors seminars has been conducted at the Oak Ridge (Tenn.) Institute of Nuclear Studies for selected MACCI majors in biology, chemistry, and physics and social sciences. These students, under the direction of the Oak Ridge Institute's professional staff, conduct experiements with specialized equipment in the realm of nuclear studies. Arrangements are planned that will provide summer employment at the Institute as research assistants for qualified students of the twelve Council colleges.
2. MACCI owns and operates a Biological Field Center on Norris Lake near LaFollette, Tennessee. Academic study at the Center is carried out during the summer terms, and correlated with courses in the biology department at Union College. Nearby mountains and many historic places are easily accessible for excursions and picnics. An organized recreational program on the campus, with swimming pool and tennis courts, is available to students.

Washington Semester

Under an agreement with the American University in Washington, D.C., Union College participates in the Washington Semester Program. Students selected to study under this program spend a full semester of their junior or senior year in Washington and are enrolled at the American University. This program affords students an opportunity to continue their college education while observing the operation of government and international agencies in the nation's capital. Detailed information on the program may be obtained from the Head of the Department of History and Political Science. (See the financial aid section for the special Robsion Political Science Scholarship.)

Appalachian Regional Studies

Reflecting the college's primary mission of improving the quality of life of the Appalachian people, Union is developing a multi-faceted Appalachian Regional Studies Program. One or more components of the program should be of interest to all students. The program seeks to develop an appreciation of the people, culture and socio-economic conditions of the mountain area; to provide opportunities for direct service, research and personal experience in the region; to provide the skills and critical understanding needed to work in this age; and to help the student develop understanding of himself and others.

The Program at present consists of the Appalachian Semester, Environmental Studies, and ALCOR, each outlined in detail below, and of various academic courses, identified in appropriate departmental and division course listings. The student will find here an interdisciplinary approach to the history, politics, music, natural resources, economics, and other aspects of the society, which will stand him in good stead no matter where he or she may live later.

By Fall, 1976, formal 30 hour programs will be available for the student who wants to pay special attention to problems and opportunities in the Appalachian mountains. An "Area in Regional Studies" will offer the social science or humanities student an in-depth acquaintance with politics, culture, economics, and art forms of the Southern mountains. The student of the natural sciences will find in the "Environmental Studies Area" a high-quality professional training as well as an understanding of the political and economic context in which environmental issues take form. The "General Education—Regional Component" will deal with the philosophy, and methods of teaching in a region with distinct socio-economic and cultural heritage. Inquiries about the Appalachian Regional Studies program and its areas of concentration should be directed to the Coordinator, Appalachian Regional Studies, Union College.

Appalachian Semester

The Appalachian Semester, which is operated twice yearly during the fall and spring terms, is a unique interdisciplinary academic program in which mature second semester sophomore, junior and senior students from Union College and other institutions throughout the United States devote their full time to studying the Appalachian region—its strengths, problems and challenges. Students earn a total of fifteen semester hours of academic credit. Nine hours of credit are offered in sociology at the upper division level, and six hours are offered at either the lower or upper division level for field work in a variety of disciplines. Field work may be either experiential learning of a regional nature in a local service agency or other institutional setting, or it may be directed study in the region at large. The program is designed to combine interdisciplinary classroom experiences and on-the-scene community experiences into a "living-learning" situation where total involvement of students and faculty may take place.

Opportunities are provided to discuss with local and regional leaders assets and problems of the region, and field trips are coordinated with seminar discussions in order to involve participants on the spot with current regional issues. Following an orientation of approximately four weeks, students travel into the area and learn through independent study or work in a variety of private and public service settings.

Course descriptions are included in the curriculum section of this catalog. Detailed information and application forms are available from the Director, Appalachian Semester, Union College.

Environmental Education Center, Cumberland Gap

Since 1970 Union College has conducted a variety of environmental programs for students and community leaders. The focal point has been the College's Environmental Education Center in the

Cumberland Gap National Historical Park. This special 100 acre campus, located near the town of Middlesboro and about 35 miles south of Barbourville, includes classrooms, dormitories, dining hall, gymnasium, conference rooms, library, laboratory, exhibits, weather station, and trails. The 20,000 acres of the surrounding national park provide excellent opportunity for environmental field study. The center offers workshops, conferences and week-long residence programs to area teachers and school groups as well as to community and private organizations.

Environmental Studies Area

The Environmental Studies Program has been strengthened by the addition of an environmental scientist on campus and by association with the Appalachian Studies Program. New courses in regional geography, man and environment, and geoscience are being taught and, combined with Union's strong offerings in biology and human ecology, offer the student a broad environmental education.

With further definition, and development of a modeling course, a 30-hour, formal "Environmental Studies Area" will be available in the Fall of 1976. The area will include, in addition to courses and activity outlined above, systematic interaction with Union's other Appalachian programs.

Environmental Summer Semester at Cumberland Gap

The highly successful Environmental Summer Semester of 1975 will be repeated each summer at the Environmental Center at Cumberland Gap. This five-week, interdisciplinary, residential seminar for graduate teachers and mature undergraduates offers six hours credit for intensive classroom and fieldwork on environmental issues in the Appalachian region. Special attention is given to environmental education. For further information, contact the Director, Environmental Summer Semester, Union College.

Appalachian Leadership and Community Out Reach, Inc., (ALCOR)

ALCOR, Inc. is a people-to-people program designed to link health, social and educational services to people in isolated rural areas of Southeastern Kentucky. The program objectives are to: open doors of thought and experience to all involved; encourage participation and communication; develop indigenous leaders in isolated rural regions; provide a bridge between consumer and professional agencies; develop positive health and nutrition habits; offer alternatives to continued migration to urban centers; enable local students to serve their communities and to meet the expenses of their college education.

The focal points for achieving these objectives in communities are: recreation, education, health, nutrition and community development. These activities are carried out by thirty students in a ten-week summer program. Students spend forty hours a week in direct services to community residents. The ALCOR experience provides students the opportunity to supplement classroom learning with meaningful field work while earning financial resources to continue their education. Three to six hours of experiential education credit is available to students on an optional basis through the Office of Experiential Education. For application information contact the ALCOR Campus Director.

Career Planning, Academic Advising, and Placement Services

Upon admission to Union College, a student will begin a process whereby career planners and faculty advisors assist students to articulate their career goals, to select academic courses of study appropriate to those goals, and to achieve suitable placement upon completion of their studies. Career Planning Counselors will travel to the homes of new students accepted by the college before their first semester in residence in order to insure that the proper counseling and advisement can be initiated at the outset of the student's tenure at the institution. A student should therefore be insured of a smooth

transition from high school to the academic environment of Union College with the appropriate services available throughout the student's tenure and beyond.

College-Level Examination Program (CLEP)

Union College is a regional testing center for the College-Level Examination Program (CLEP). The CLEP tests provide college credit for material students have mastered through self-study or through unaccredited classes. Up to 30 semester hours of credit can be earned at Union College by passing the CLEP examinations; there are five general exams and 33 in specific subject areas. As an Open Testing Center, Union administers exams the third Saturday of each month.

No charge is made for the credit earned in the general battery. A $25 fee is charged for the recording of each advanced subject examination in lieu of tuition. The general battery must be taken before the student reaches sophomore status.

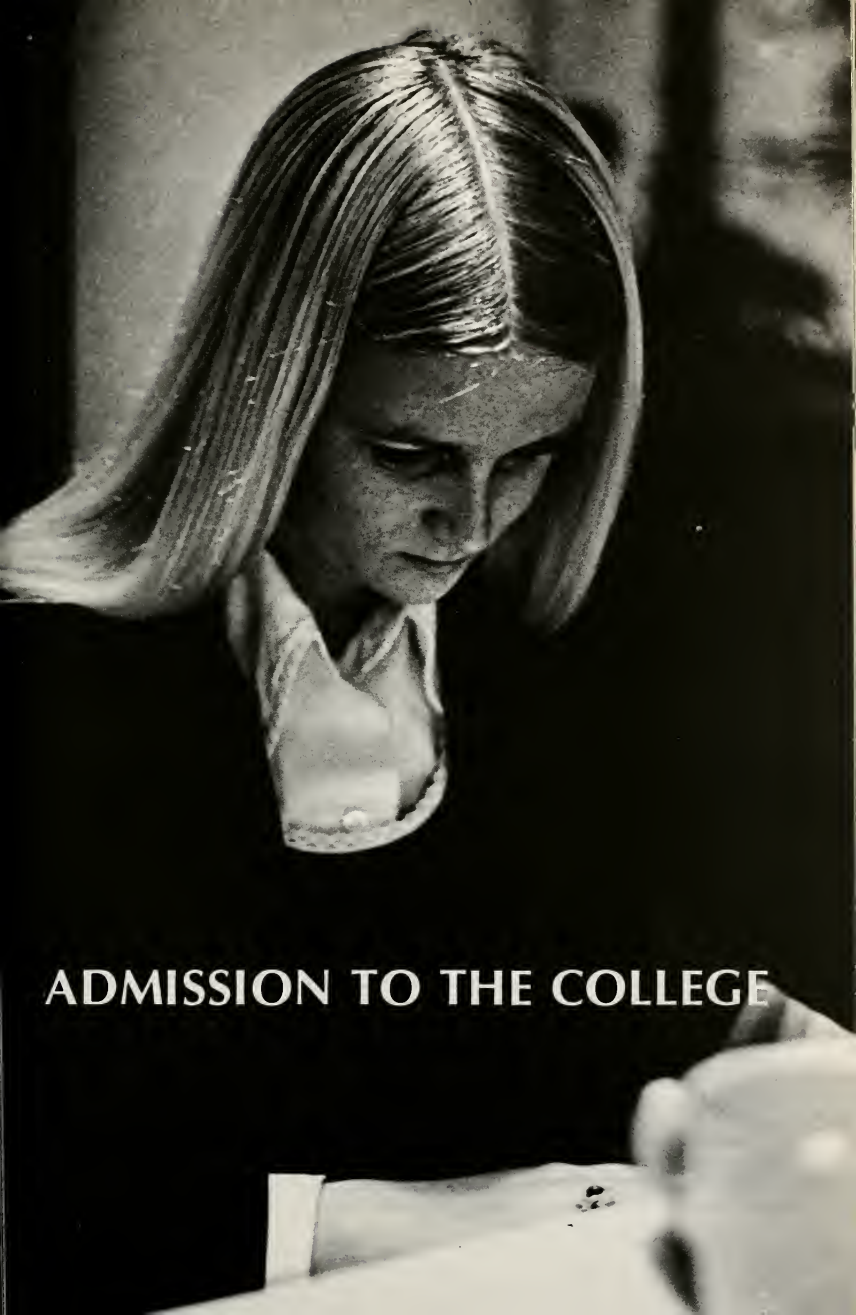
Experiential Education

Certain types of off-campus work-learning activities are an integral part of various curricula at Union College. These include cooperative education, field work with social and governmental agencies, and independent research. These activities are all exercised under faculty control and supervision during the regular school term and are evaluated in terms of credit toward degree requirements.

These programs are open to Union College students with sophomore or higher rank who are not on probation.

Arrangements for off-campus work-learning experiences must be initiated by the student with the Office of Experiential Education.

Union College's Experiential Education program is approved for the training of veterans and other eligible persons under the provision of Title 38, chapters 34, 35, and 36, U.S. Code.



ADMISSION TO THE COLLEGE

APPLICATION FOR ADMISSION—Undergraduate

Each applicant for admission to Union College must present to the Committee on Admissions satisfactory evidence of his previous academic training and good character. He should:

1. Write to the Director of Admissions, Union College, Barbourville, Kentucky 40906, for an Application for Admission form.
2. Return the application to the Director of Admissions. No admission fee is required. Upon receiving the application for admission, the admissions office will mail the applicant a Health form and two reference forms which should be completed and returned at the earliest possible convenience.
3. Have an official transcript of all high school and previous college work mailed directly from these schools to the Office of Admissions. Only those transcripts mailed directly from the school previously attended are considered official. General Equivalency Diploma certificates will be accepted, at the discretion of the college, in lieu of a high school diploma.

Upon receipt of the application for admission, the Office of Student Affairs will mail a student information sheet/housing application. This form should be completed and returned promptly. Students not planning to live on campus should disregard the application for housing and complete only the student information portion. A refundable $40.00 room deposit should accompany the application for housing.

The child of a disabled or deceased veteran, under Public Law 864, should file an application for program of Education and Training with the Veteran's Administration which will issue a Certificate of Eligibility to attend Union College.

The Committee on Admissions will act immediately upon the receipt of all credentials and deposits. Each applicant will be notified in writing promptly thereafter.

Admission to the Freshman Class—Each applicant should submit a transcript which shows that he has graduated with sixteen units from an accredited high school with at least a "C" average, ranks in the upper two-thirds of his graduating class, and has acceptable scores on SAT or ACT tests. Ten of the units earned must be in academic subjects: three units in English, two units in mathematics, two in social studies, and two in science. Foreign language is recommended. Students failing to meet these standards may be admitted if the Committee on Admissions thinks other factors warrant special consideration. The student who fails to meet these standards, but who is admitted because factors warrant special consideration, may be admitted on probation.

An applicant who has graduated from a non-accredited high school must establish his ability to pursue a college program before he can be recognized as a candidate for a degree. This may be done by completing at least twenty-four semester hours of residence study with not less than a "C" average.

An applicant, not less than 21 years of age, may be admitted on a high school equivalency certificate, based on the General Education Development tests, provided the scores earned are equal to or above the minimum recommended for college entrance by the American Council on Education.

There is open admission for all veterans and all persons twenty-one years of age and over, who have not attended another institution of higher education but who have been graduated from an accredited high school.

Freshman Orientation and Registration—Each member of the freshman class must be present at the time scheduled for Freshman Orientation. A program concerning problems peculiar to beginning students will be conducted by the faculty and a group of advanced students. The faculty of the college will be present to aid students in registering and to offer advice in choosing courses.

Admission to Advanced Standing and Transfer Students—Applicants who desire admission with advanced standing must present credits from an accredited community college, junior college, senior college, or university. The transcript of credit must show that the applicant has been honorably dismissed, that the entrance requirements of Union College have been met, and that he has a "C" average. Students failing to attain a "C" average may be considered for admission on probation providing there is evidence that he can attain a 2.0 cumulative grade point average in a reasonable length of time. All credits earned from an accredited community college, junior college, senior college, or university can be transferred to Union College. Sixty-seven semester hours is the maximum amount of junior college or community college credit which may be counted toward a degree.

Information concerning Advanced Placement, CLEP, High School Special Program, and Veterans credit is found in the Special Programs section of the catalog.

War Orphans Education—Application should be made at the nearest Veterans Administration Office, prior to registration for college.

Admission to the Graduate Program—The applicant must file an application for admission with the Asst. Vice President for Graduate Affairs, Union College, Barbourville. Two official transcripts of all college work are required and must be mailed directly from the school previously attended. There is a $15.00 admission fee, which is refunded only when admission is denied.

Admission as Auditors—Students may audit some classes, with the permission of the instructor. They must register as if for credit. There is an audit fee.

Admission of Foreign Students—Foreign students must complete the regular admissions process. In addition, a $200.00 admission deposit must accompany the application. After a foreign student is accepted he must request an I-20 form from the Office of Admissions. Once the student enrolls, the $200.00 admission deposit will be applied toward his tuition.

In order to be considered for admission, a foreign student must score at the 107 level or higher on the ELS English Proficiency and Achievement report and/or score 500 or higher on the Test of English as a Foreign Language (TOEFL).

When the admission process is completed, a foreign student is obligated to stay at Union for at least one year. No official transcript or recommendation will be released until the student fulfills the year's obligation. If a student leaves before one year, he must be reported to the Immigration and Naturalization Service. One year is interpreted as two full semesters, excluding summer sessions.

The student must pursue a full course of study. Those who drop to part-time status must by law be reported to the Immigration and Naturalization Service. No visas and/or passports will be renewed until the student's account is paid in full.

Physical Examination—Union College attempts to give aid to all students in matters of health. A thorough examination by a regular physician is required as a part of the entrance procedure of each student.

Physical Examination report forms may be obtained from the Office of Admissions or from the college nurse, and the examination should be made by the applicant's family physician. If a completely filled out medical examination report is not filed at registration, the student is required to have the examination made by a local physician, at his own expense, before registration is completed.

Room and Board—If a campus dormitory room is desired, application must be made with a reservation deposit of $40.00. No room reserved for a student will be held unoccupied beyond the day of registration unless there is a definite explanation and a request to occupy at a stated later date.

The $40 room deposit is refundable up to one year after the last date the student is enrolled at Union College. Should a student pay room deposit, and decide not to enroll at Union College, he will be eligible for a refund up to one year from the date his deposit was received. After the refund period expires, the student forfeits his deposit to the college. A student must submit a written request to the Office of Student Affairs for the refund. Refund of room deposit is conditional upon the depositor leaving the dormitory rooms and equipment undamaged. All readmission students are assigned housing according to their new date of admittance. The readmission acceptance date becomes their room deposit date.

Room keys that are not turned in to the Office of Student Affairs at the end of the term or school year will be charged to breakage at the rate of $1.00 a key. The same rate will be charged to any student for whom it is necessary to replace keys.

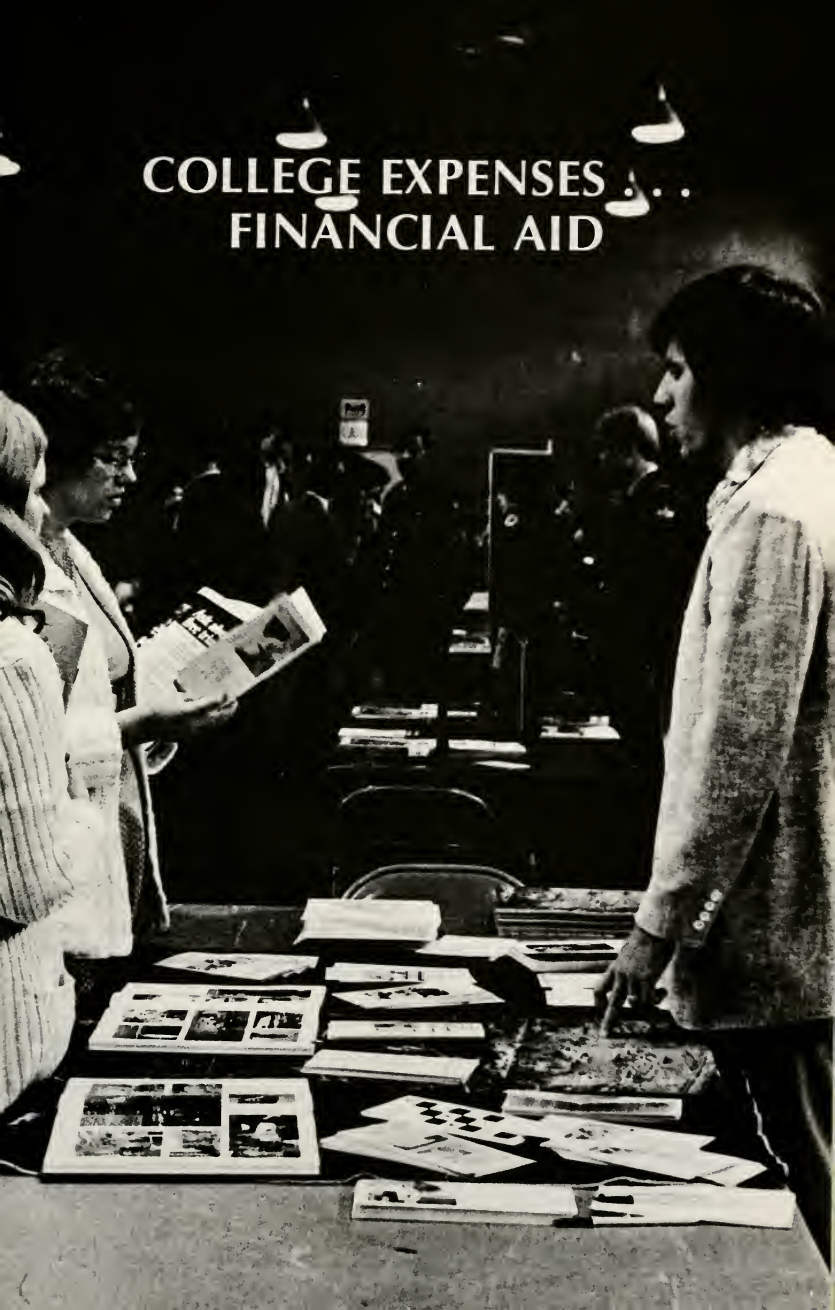
Linen and towels will be provided each student living in the college dormitories. The college does not provide blankets, rugs, or curtains. Students should bring study lamps or may purchase them through the college bookstore. Light bulbs for these should not be in excess of 75 watts.

All students who room on the campus are required to board in the college dining hall unless they have permission to do otherwise, from the Dean of Students.

Off Campus—All students 21 years or older, juniors and seniors (according to the Registrar's Office), veterans, and married students, can live off campus if they so desire. Juniors and seniors under 21 must have parental permission.

Liability—Union College will not be responsible for loss of personal property or bodily injury resulting from fire or other causes.

COLLEGE EXPENSES . . . FINANCIAL AID



The academic year of nine months is divided into two semesters and a January Interim term. The rates quoted below are for one semester. The cost of a regular session of nine months can be found by multiplying a semester's expenses by two. All checks should be made payable to Union College.

Undergraduate Expenses:

Tuition (10 to 17 semester hours)*	$ 840.00
Room	160.00
Private Room	225.00
Board (19-meal week)	300.00
Full Time Students	
Activity Fee***	15.00
Total for Boarding Student*	1315.00
Total for Non-Boarding Student**	855.00
Part-time tuition for all registration under ten or above seventeen semester hours, per semester hour	33.00

Graduate Expenses:

Graduate Tuition, per semester hour	40.00
Activity ID card (required for boarding graduate students)	10.00

Summer Session Expenses:

Tuition, Undergraduate, per semester hour	33.00
Graduate, per semester hour	40.00
Room, each 5-week term	45.00
Private Room, each 5-week term	65.00
Board—full week, each 5-week term (21-meal week)	105.00
—short week (Monday breakfast through Friday lunch each term (14-meal week)	90.00

January Term:

Board	40.00

The January Term may be considered as part of the fall semester for tuition purposes at the student's option—i.e., the student may restrict his fall load to a maximum of 14 hours and pay no tuition for the January Term. This option is available only to full-time students. The fall load will be determined by the number of hours carried as of September 11, 1976.

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*Vacation periods are not included in the quotation. Dormitories are closed during intermissions and Christmas holidays. The college reserves the right to entertain delegates to conventions and other related groups in the residence halls during vacation periods. Students will be notified in advance of such contemplated occasions and assurance given regarding the safe-guarding of their personal property during such occupancy. Due to uncertainties in the price of food the College charges for Board may, if necessary, be changed at any time without notice.

**$10.00 of this amount each semester, is designated for Student Center construction, as voted by students December 10, 1962. $1.00 is collected for Student Senate dues, $1.00 for class dues, and $1.50 for the I.D. card.

***For Student Activities

Note: Students in special programs which require them to be off campus regularly at meal time may make special arrangements for board through the vice-president for Academic Affairs.

The charges for individual meals in the Dining Hall are as follows: Breakfast, $1.00; Lunch, $1.20; Dinner, $1.35; Sunday noon, $1.50.

Other Expenses

Audit fee, per semester hour	$ 10.00
Change in schedule fee	2.00
CLEP—Advanced Tests only (per test)	25.00
College Court Rental, per month (all utilities furnished)	65.00
Examination: late examination fee	1.00
late final examination fee	5.00
credit by examination, (per course)	25.00
Foreign Student-Admission Deposit	200.00
Graduate Activity Fee (required for boarding graduate students)	10.00
Graduate Admission Fee	15.00
Graduation fee for Assoc. Degree or Diploma	20.00
Graduation fee for Bachelor's degree	25.00
Graduation fee for Master's degree	30.00
Graduation in absentia fee	10.00
Music: Preparatory Department: Piano, Strings, Wind Instruments	
one half-hour lesson, weekly, per semester	50.00
one-hour lesson, weekly, per semester	75.00
Music lessons: part-time and special students, per semester	33.00
Transcript—after first copy (one week's notice required)	1.00

Terms of Payment

Full semester's charges, room, board, tuition, and fees, must be paid no later than registration date. Should the student have an approved loan, scholarship, workship, workstudy grant, or other form of financial assistance, such amount will be deducted from the total charges with the then net amount payable at the time of registration. The Office of Business Affairs can make no exception to this regulation. The college also reserves the right to hold a student's transcript or other academic records until all financial obligations to the school have been satisfied.

Refund Information

Since faculty contracts and other commitments are made by the college for the entire year in advance, the following refund schedule has been established in order that the college and the student may share the loss equitably when it is necessary for a student to withdraw or to make a change in his program.

1. There will be no refund given for room rent unless the decision to withdraw is made by day of registration. This rule applies to all withdrawals including students dismissed from college.
2. Board will be refunded in full amount unused to the date of withdrawal. A full week is charged for any fraction of a week.
3. Tuition will be refunded on the following basis:
   REGULAR TERM—Twenty percent of the total for tuition will be charged for each of the first five weeks. No refunds will be made on tuition after the fifth week. Any part of a week will be treated as a full week. Refund is based on tuition charges, less $10 student center allocation, $1 class dues, and $1 student senate fee.

SUMMER TERM—Fifty percent of total tuition will be charged the first week and fifty percent the second week. No refunds following the second week. Any part of a week will be treated as a full week.

4. Any registrant who has completed registration and who has failed to attend a single class may have his account credited for the money paid, this to apply for use on future registration within a twelve-month period.
5. **Room Reservation Deposits**—This deposit will be refunded if request is made in writing not later than August 1 for the Fall Semester or thirty days before the opening of any other semester for which the contract is first effective. Students, once enrolled, must submit a written request with the Office of Student Affairs at least 30 days before the end of the term for cancellation of the contract. This deposit will be refunded upon receipt of written authorization by the Dean of Students or Dean of Women indicating the depositor is no longer enrolled as a student at Union College and that he has left dormitory rooms and equipment undamaged.
6. No fees are returnable.

A student is considered to be enrolled until he formally notifies the Office of the Registrar of his withdrawal and all refunds will be based on the date of notification.

Financial Assistance

Standards for Receiving Financial Aid

Union College maintains an extensive program providing opportunities for financial assistance to promising students who need help in meeting their expenses, or who have attained particular merit in scholarship or other accomplishments. Only those students whose scholarship and character indicate leadership ability and promise of future usefulness will be approved for aid.

Students receiving financial assistance may be deprived of their aid at any time if they are negligent in the performance of their duties, careless in their conduct, or unwilling to cooperate fully with the policy of the college.

The actual amount of financial aid awarded to a student is determined primarily by the student's financial need. The type of assistance a student receives is determined by need and qualifications.

Union College participates in the College Scholarship Service (CSS) of the College Entrance Examination Board. Participants in CSS subscribe to the principle that the amount of financial aid granted a student should be based upon financial need. The CSS assists colleges and universities and other agencies in determining the student's need for financial assistance. Entering students seeking financial assistance are required to submit a copy of the Parents' Confidential Statement (PCS) form to the College Scholarship Service, designating Union College of Kentucky, College Code 1825, as one of the recipients by May 15. The PCS form may be obtained from a secondary school or the College Scholarship Service, P.O. Box 176, Princeton, New Jersey 08540; P.O. Box 1501, Berkeley, California 94704; or P.O. Box 881, Evanston, Illinois 60204.

Applying for Financial Aid

Inquiries regarding scholarships, loans, and financial aid should be addressed to the Office of Financial Aid, Union College, Barbourville, Kentucky 40906.

The only aid for which a foreign student may be eligible is scholarship aid. A foreign student must have completed four consecutive regular semesters at Union College to qualify for scholarship aid and must be approved by the Student Aid, Grants and Scholarship Committee.

1. No student may be approved for financial aid until official admission to Union College has been granted.
2. An application for financial aid must be submitted to the Office of Financial Aid. This form may be obtained by writing the Director of Admissions. This form must be completed and submitted by May 15 preceding the fall term.
3. Parents or guardians of applicants must complete the Parents' Confidential Statement of the College Scholarship Service, Box 176, Princeton, New Jersy 08540, and return it, following the printed instructions on the form, to Princeton, Evanston, or Berkeley, depending on their place of residence. Blank forms are available in most high school guidance offices or from the College Scholarship Service.
4. Students applying for Kentucky State Student Incentive Grants and Kentucky Tuition Grants must submit a Kentucky Financial Aid Form. Forms are available in most high school quidance offices or from Kentucky Higher Education Assistance Authority.
5. Students applying for a scholarship or other financial aid shall submit a transcript to the Office of Student Affairs, as well as to the Registrar.

Scholarships

President's Scholarships—Honor Scholarships in an amount up to $700.00 for the academic year are available to select graduates of accredited high schools enrolling in college for the first time. To qualify, students must rank in the top 3% of their graduating class. Evidence of high school rank must accompany the application for financial aid certified by the high school attended. All test scores should also accompany the application for financial assistance.

Honor Scholarship renewals will be based upon a scale of cumulative grade point average as follows:

Cumulative Grade Point Average	Amount of Award
3.0 . . . 3.49	$500.00
3.5 . . . 4.00	$700.00

Alumni Scholarships.—The Alumni Association of Union College awards two scholarships annually on the basis of character, need, and evidence of future usefulness. Each scholarship is for $400. Recipients are selected by the Alumni Scholarship Committee

Appalachian Regional Scholarship.—Two friends of Union College have established the Appalachian Regional Scholarship to be awarded to an Appalachian student on the basis of financial need and promise of future usefulness to the region. The stipend is $150 per semester.

Bank of Harlan Scholarships.—A number of scholarships are given annually to qualified students from Harlan County by the Bank of Harlan. The stipends are determined according to financial need and academic excellence.

Barbourville Kiwanis Scholarship.—The Kiwanis Club of Barbourville, Kentucky, has supplemented an educational fund originated by Mr. C. F. Heidrick and established a scholarship fund at Union College for promising students from Knox County, Kentucky.

Barbourville United Methodist Church Music Scholarships.—Annually The First United Methodist Church of Barbourville, Kentucky, awards four scholarships to music students amounting to $200 for a total of $800. Consideration is given for participation in the music program of the local church.

Henry C. Black Memorial Scholarship. This scholarship is given as a memorial to Mr. Henry C. Black, a graduate of Union College, to a freshman student graduating from a high school in Kentucky or Tennessee. The scholarship stipend is $250 and is awarded on the basis of need, scholarship, character, and promise of future usefulness.

John A. and Hannah P. Black Memorial Scholarships for Christian Workers. —The late Dr. and Mrs. Henry C. Black of Johnson City, Tennessee, endowed a scholarship that provides an annual stipend of $500 for a promising student who plans a life of service in The United Methodist Church.

Dr. and Mrs. James F. Blair Scholarship.—Dr. and Mrs. James F. Blair of Barbourville, Kentucky, have endowed a $250 scholarship for students from Knox County, Kentucky. It is awarded annually to a student in the sophomore, junior or senior year on the basis of need, scholarship, character, and promise of future usefulness.

Kathy Brick Memorial Scholarship.—Mr. and Mrs. Theodore F. Brick of Dayton, Ohio, provide annually a scholarship of $100 for a student who participates in the competitive swimming program of the College.

The Eulalia Serrano Cabrero Memorial Scholarship.—Miss Carmen Cabrero '64, Jacksonville, Florida, has established a scholarship in memory of Eulalia Serrano Cabrero, a 1964 graduate of Union College. The scholarship will pay $100 per year, and is made available to a needy student of minority background interested in social work, preferably a Methodist.

W. S. and Bess Carpenter Scholarship.—Mr. and Mrs. W.S. Carpenter of London, Kentucky, provide annually a scholarship for a worthy freshman, preferably from Southeastern Kentucky. The stipend varies with need, but is in the $500-$700 range.

E. Nettie Edinger Memorial Scholarship.—The late Mr. Joseph Edinger endowed this scholarship in memory of his sister. The scholarship is awarded annually to a deserving and worthy student enrolled at Union College.

Alfred I. DuPont Scholarship Fund.—The late Mrs. Alfred I. DuPont of Wilmington, Delaware, established a scholarship endowment, the income from which is used annually to provide one or more scholarships to needy students having high academic potential. Preference in the awarding of these scholarships is given to students from the Appalachian counties of Kentucky and surrounding mid-Appalachian region in adjoining states.

Dr. J. Edward Faulkner Memorial Scholarship.—Mrs. J. Edward Faulkner of Barbourville, Kentucky, provides an annual scholarship in memory of her late husband. The scholarship is awarded to a junior or senior who plans a life of service in the healing arts, with preference being given to a predental student.

Ernest Goodwin Green Memorial Scholarship.—Mrs. Ernest Green, Grand Rapids, Michigan, has established a memorial scholarship to be awarded annually to a drama major considered to be the most capable of contributing toward the success of the department. The scholarship is given in memory of her late husband.

John O. and Harriet B. Gross Memorial Scholarship.—Family and friends of Dr. and Mrs. John Owen Gross have endowed a scholarship in their memory. Dr. Gross was president of Union College during the years 1929-1938. The scholarship is awarded annually to a senior on the basis of scholarship and leadership, with preference being given to students from Northern Kentucky. The stipend and requirements are the same as for "United Methodist Scholarships."

Hubbuch in Kentucky Scholarship.—Hubbuch in Kentucky provides an annual scholarship of $400 for a student from Louisville or Jefferson County, Kentucky, who otherwise would be financially unable to attend college. It is awarded annually to a freshman on the basis of financial need, scholarship, character, and promise of future usefulness, with special emphasis on students who plan to enter private business activities in Louisville or Jefferson County.

Irene Hughes Scholarship.—Miss Irene Hughes (AB '37; MA '63), Barbourville, Kentucky, provides an annual scholarship of $200 for a freshman girl, a graduate of Knox Central High School, who has been a member of the High School Honors English Class and who exemplifies Christian principles of conduct. The scholarship will be awarded by the Alumni Scholarship Committee.

Rural Electric Scholarship.—The Inter-County Rural Electric Cooperative of Danville, Ky., has established a $100 annual scholarship to assist a Union College student whose parents are members of Inter-County RECC in the counties they serve. This scholarship is awarded on the basis of financial need, character, and academic promise. Preference will be given to freshmen.

Professor and Mrs. Millard L. Jordan Scholarship.—Professor and Mrs. Millard L. Jordan of Lakewood, Ohio, have established a scholarship fund at Union College to aid worthy Appalachian students. The income from the fund will be awarded as a scholarship to a student each year on the basis of need, scholarship, character, and promise of future usefulness.

Junior College Scholarship.—A number of $500 scholarships are available to graduates of junior or community colleges who have earned the A.A. or A.S. degrees with a GPA of at least 2.5 on a 4 point scale. They are renewable for the senior year if the student maintains at least a 2.5 average at Union College.

Junior Study Club Scholarship.—The Junior Study Club of Barbourville, Kentucky, provides a $200 scholarship at Union College to aid worthy students from Knox County, Kentucky. The scholarship is awarded to a girl who graduated from a high school in Knox County who is a Junior or Senior at Union College. The scholarship recipients are chosen on the basis of need, scholarship, character, and promise of future usefulness.

Jeffrey W. Kronk Memorial Scholarship.—Mr. and Mrs. Walter F. Kronk of Huntsburg, Ohio, have endowed a scholarship for a needy, qualified student from Geauga, Lake, or Ashtabula counties in Ohio, or from the Appalachian counties of Southeastern Kentucky. The scholarship is in memory of their son, Jeffrey, who was enrolled at Union College from 1963 through 1967. Should there be no qualified students enrolled from these areas in any given year, the endowment income will be used to support the Lincoln-Civil War Collection at Union College.

W. B. Landrum Memorial Scholarship.—Mr. John W. Landrum of Harrodsburg, Kentucky, provides annually a scholarship of $350 for a promising United Methodist ministerial student in memory of his father. The student benefited by this scholarship must exhibit outstanding personal attitudes of religious sincerity, devotion, and earnestness in purpose. Demonstrated failure to exhibit these qualifications to a high degree will result in the forfeiture of the scholarship.

London Laundry Scholarship.—The London Laundry & Dry Cleaners, London, Kentucky, has established an annual $250 scholarship to assist a student graduating from a high school in Southeastern Kentucky during his freshman year at Union College. The scholarship is awarded on the basis of scholarship, character, and promise of future usefulness.

National United Methodist Scholarships.—The Board of Education of the United Methodist Church makes available annually to several United Methodist students scholarships covering tuition and fees. The awards are made on the basis of character, need, and scholastic ability. Only students having at least a "B" average are eligible.

Presser Foundation Music Scholarship.—Union College receives each year from the Presser Foundation, Philadelphia, Pennsylvania, a grant of $400 to be given by the College as a Music scholarship. Recipients of this scholarship are selected by the President of the College and the Head of the Music Department. The recipient must be majoring in music, and preference will be given to students preparing to become teachers of music.

E. O. Robinson Mountain Fund Scholarship.—The E. O. Robinson Mountain Fund has established an annual scholarship program to assist needy students who reside in the Appalachian Region of Eastern Kentucky. Students receiving these scholarships should give promise of being able to complete their academic work successfully. They should be and remain unmarried while receiving assistance from this scholarship. Qualified persons should apply to the Office of Financial Aid.

Robsion Political Science Scholarship.—Honoring Senator John M. Robsion, Sr., and Congressman John M. Robsion, Jr., the Robsion Political Science Scholarship provides a stipend of $750 for the Union College student participating in the Washington Semester Program each year.

Howard Rose Most Valuable Player Award—given to the Baseball Team member voted as the outstanding player by the members of the Baseball Team. The award is given by Dr. Robert E. Rose in honor of his father.

Sanders Honor Scholarships.—Colonel Harland Sanders of Louisville, Ky., provides annually a number of honor scholarships with the same stipend and on the same terms as the President's honor scholarships. The Sanders Honor Scholarships are limited to students who do not use tobacco and alcoholic beverages.

Sims Scholarship Fund.—Reverend and Mrs. Harry C. Sims of West View, Kentucky, have established a scholarship fund at Union College to aid worthy students preparing for the United Methodist ministry. The income from the fund will be awarded as a scholarship to a student each year on the basis of need, scholarship, character, and promise of future usefulness.

Cawood Smith Harlan County Scholarship.—Mr. Cawood Smith, Harlan County attorney, has established a $5,000 endowment for a scholarship to be awarded to the son or daughter of a miner from Harlan County, Kentucky. The recipient shall be a resident of Harlan County and selected upon the basis of need, scholarship, and promise of future usefulness to the coal region. The stipend shall be $325.

Hulbert Taft, Jr., Memorial Scholarship.—Mrs. Thomas C. Haydock, Sr., of Cincinnati, Ohio, has provided a scholarship endowment as a memorial to her late husband, Hulbert Taft, Jr. The income from the endowment will be used annually to provide one or more honor scholarships to needy students having high academic potential.

Edward Townsend Memorial Scholarship.—Mr. Milton H. Townsend, Vice President for College Relations and Development at Union College, has endowed a scholarship for a worthy student with preference being given to a history and political science major. The stipend has been established in memory of Mr. Townsend's late father.

Union National Bank Scholarship.—The Union National Bank of Barbourville, Kentucky, has established a half-tuition scholarship of $815 at Union College to aid worthy students from Knox County, Kentucky. It is awarded to a student graduating from a high school in Knox County, for the freshman year at Union College, on the basis of need, scholarship, character, and promise of future usefulness.

Harry C. Viall Memorial Scholarship.—Mrs. Harry C. Viall of Barbourville, Kentucky, has endowed a memorial scholarship for a needy, qualified student with preference going to an individual from Knox County. The annual scholarship is given in memory of her late husband, Harry, who was a prominent local businessman.

Mr. & Mrs. O.H. Viall Memorial Scholarships.—The family of Mr. and Mrs. O.H. Viall of Barbourville, Kentucky, have established a memorial scholarship fund at Union to aid worthy students. The number and size of the scholarships vary according to student financial need.

William M. Wilson Memorial Scholarship—Mrs. Eva Oldfield Wilson of Barbourville, Kentucky, has established a scholarship fund in memory of her late husband. The income from the fund will be used to provide an annual stipend of $250 for a promising student preparing to teach in the elementary or secondary schools.

Dr. Henry M. Zimmerman Scholarship.—Dr. Henry M. Zimmerman of Pompano Beach, Florida, has established a scholarship endowment, the income from which is used annually to provide a scholarship for needy students of exemplary character who show promise of being able to contribute to the well-being of their country and their fellowman.

Special scholarships may be available for Radiologic Technology students of up to $3,000 per year.

Other Scholarships—Other scholarships are often available for students of exceptional academic ability and/or great financial need. Inquiries should be addressed to the Office of Financial Aid.

Assistantships

Several Senior Assistantships are made available annually in the academic divisions. The assistantships are open to students of outstanding scholastic ability who exhibit great promise of future usefulness and who are considering graduate studies with a view of entering college teaching. The duties of the Senior Assistants include occasional classroom lectures, research, remedial work with beginning students, assisting in laboratories, etc. The Assistants are expected to spend a minimum of twelve hours per week on the work assigned. The awards are made by the Scholarship Committee upon recommendation from the Division Chairmen. Senior Assistants receive a stipend of $600 per year.

Resident Grants

A Resident Grant program provides a student's room for an academic year. Grants are given on a basis of academic achievement, participation in campus activities, and need.

Workships

The college seeks to employ as many students as possible in jobs on the campus. Such jobs consist of stenographic work in college offices, science laboratory assistance, in the library, student center, gymnasium, and on the campus grounds. Each workship student is under the supervision of a faculty member or other college employee who makes a monthly time report to the Office of Student Financial Aid where credit on an hourly basis is entered on the student's account. The Office of Financial Aid can withdraw the workship at any time if student performance or attitude is unsatisfactory.

Work-Study Program

Undergraduate students who need financial assistance to attend college may apply for employment under the College Work-Study Program at Union College. Preference is given to students who have the greatest need after the application of all public and private grants. Students who work part-time while attending school and full-time during vacation periods may earn a large portion of the amount needed for college expenses.

Graduate students who have need and qualify may be considered for the College Work-Study Program. Students must file a Parent's Confidential Statement or a Student Financial Statement.

Supplemental Educational Opportunity Grants

The Educational Opportunity Grant Program provides grants of from $200 to $1,000 to students of exceptional financial need who are in academic good standing at Union College. This program, financed by the government, is an "opportunity" program and not a "scholarship" program, and therefore students are eligible if allowed to remain in the institution, if academic promise continues, if it is reasonable to expect graduation, if federal funds continue to be available, and if financial need remains. Those interested may receive applications and further information through the Office of Financial Aid.

Basic Educational Opportunity Grant

The Basic Educational Opportunity Grant Program provides grants to students who attend eligible post-secondary institutions and is based on financial need. The federal government decides the amount of the stipend. Students who attend Union College usually qualify for approximately $900. Applications are available in the Office of Financial Aid or at your local Post Office.

State Student Incentive Grant

The grant program provides grants to students who are residents of the Commonwealth of Kentucky and who will attend eligible post-secondary institutions in the State of Kentucky. Students must be able to show financial need for this assistance as determined by evaluation of his/her Kentucky Financial Aid Form. These forms are available in the Office of Financial Aid or from Kentucky Higher Education Assistance Authority.

Kentucky Tuition Grants

The grant program provides grants to students who are residents of the Commonwealth of Kentucky and who will be attending a private post-secondary institution in the State of Kentucky. Students must demonstrate financial need as determined by evaluation of his/her Kentucky Financial Aid Form.

Loan-Grants

Ministerial Loan-Grant.—Ministerial loan-grants amounting to $400 for the academic year are available to students studying for the ministry. To be eligible for this aid the student must have a license to preach, or enroll in the non-credit religion course, Conference Studies, which is designed to prepare candidates for the obtaining of the license to preach. Renewal of the loan-grant depends on the student's successfully passing this course and obtaining the license to preach before the beginning of the next academic year. Applicants qualified for the loan-grant must sign a note for the amount received each semester. These notes will be cancelled after the individual has entered into the full-time ministry. If the student changes his plans and enters another field of endeavor the notes become due and payable.

Loan-grants amounting to $700 for the academic year are available to United Methodist Local Preachers who agree to serve four years in the Kentucky or Louisville Annual Conference. These notes will be cancelled after the specified service has been fulfilled.

Aid to Children of Ministers.—Special consideration for various kinds of financial aid is given to unmarried dependent children of United Methodist Ministers. The total amount of assistance will be based on financial need. Applications should be submitted to the Office of Financial Aid and additional information may be secured from this office.

College Employee Grants.—The spouse and unmarried dependent children of full-time employees of Union College may receive a full tuition grant at Union College. A tuition grant at other colleges participating in the Tuition Exchange Program is available to employees' unmarried dependent children.

(1) Full-time employees hired after January 1, 1975, will not be eligible for tuition grants for spouses or children until they have been employed for six months unless they are under annual contract.

(2) Spouses of employees will be limited to nine undergraduate semester hours, or six graduate semester hours during a regular semester and six undergraduate or three graduate in any one summer term. Spouses wishing to take additional work beyond the above mentioned limit will be required to pay for each additional hour at the appropriate hourly rate for tuition.

Kentucky United Methodist Church Grants-in-Aid.—Any $200 per year grant-in-aid provided by a United Methodist church in either the Kentucky or Louisville Annual Conferences to a member of that Church who is enrolled at Union College as a full-time student will be matched by a $200 per year grant-in-aid provided by Union College.

Loans

George L. Bagby Loan Fund.—Mr. Bagby has provided the money to establish this loan fund for students who are Kentucky residents. Applications should be made to the Office of Financial Aid.

United Methodist Student Loan Fund.—The Board of Education of The United Methodist Church makes available to worthy students at Union College the resources of The United Methodist Student Loan Fund. Apply to the Office of Financial Aid at Union College.

National Direct Student Fund.—Union College is participating fully in the student loan-program as established by the 85th Congress in the National Defense Education Act of 1958. Only students with above average records and real financial need should apply for these loans. Special consideration in the selection of loan recipients will be given to students with superior academic background who express a desire to teach in elementary or secondary schools, and to those whose academic background indicates a superior capacity or preparation in science, mathematics, or a modern foreign language. Detailed information may be obtained by writing to the Office of Financial Aid, Union College.

Elizabeth L. Gates Loan Fund.—Mrs. Waldo Brown of Knoxville, Tennessee, has established a loan fund in memory of the mother of Mr. John B. Gates, a former student at Union College. The resources of the fund are available to senior male students preparing for the ministry.

Dr. Eugene T. Gray Loan Fund.—Dr. Eugene T. Gray, of St. Petersburg, Florida, has established this fund to aid worthy and needy students.

Burton and Verda Hensley Student Loan Fund.—Mr. and Mrs. Burton F. Hensley have established a loan fund to aid students at Union College. The resources of the fund are available to worthy and needy students.

Rev. and Mrs. Erwin King Loan Fund.—Rev. and Mrs. Erwin King have established a loan fund to aid worthy ministerial students in the junior or senior years at Union College. To qualify for a loan, the students must possess high qualities of character and scholarship.

Guy H. Williams Loan Fund.—Dr. Guy H. Williams of Cleveland, Ohio, has established a loan fund in memory of his wife, Anna Williams. The resources of the fund are available to worthy students who have spent two years at Union College and have a "C" average or better.

Book Loan Fund.—The Senior Class of 1957 established a loan fund with the hope that future classes would add to its capitalization. The resources of the fund are available to full-time students on a short-term loan basis for the purchase of required textbooks.

Knox County Chamber of Commerce Student Loan Fund.—Mr. William S. Murphy, former director of development at Union College and first vice president of the Knox County Chamber of Commerce, provided the initial gift to establish this fund. The continued support of the fund was accepted by the Knox County Chamber of Commerce as an expression of appreciation for the contribution of Union College to the educational, economic, social, and religious life of Knox County and vicinity. The Knox County Chamber of Commerce attempts to make annual contributions to this fund, and encourages local citizens to do likewise.

The Charles Henry and Glennora Rominger Krieger Student Loan Fund.—This loan fund, established by the late Glennora R. Krieger of Ft. Thomas, Kentucky, provides loans to worthy and needy students at Union College from the designated Appalachian counties of Eastern Kentucky. The terms of the loans are the same as those of The United Methodist Student Loan Fund.

Other Loan Funds.—Student loans are available from a number of funds not specifically designated for Union College students, but for which Union College students are eligible. Specific information may be obtained from the Office of Financial Aid.

Endowments

The George L. Bagby Scholarship/Loan Fund.—The late Mr. George L. Bagby of Woodford County, Kentucky, established a student financial aid endowment totaling $405,000 including accumulated interest, and this supports both scholarships and loans for Kentucky students.

The Russell M. Bennett Memorial Professor of Sociology Chair.—This chair was given to Union College by Mrs. Helen Hunt Bennett in the amount of $75,000 for the endowment of this professorship in 1946. An additional $2,000 was given for the equipment of the Business Department.

Mamie D. Chambers Endowment Fund.—The late Mamie D. Chambers of Maysville, Ky. has established an endowment fund, the income from which is used to help support grants to needy and deserving students.

Dr. Robert E. Drew Endowment Fund.—The Commission of Missions of the Hyde Park Community United Methodist Church, Cincinnati, has established an endowment fund in honor of the Rev. Dr. Robert E. Drew, former associate pastor of the church and an honorary alumnus of Union College. The income from this fund will be used for scholarship grants to foreign students.

Dr. Franklin Duncombe Memorial Fund.—Mrs. Helen Duncombe of Haverford, Pa., has established an endowment fund in memory of her late husband, an honorary alumnus of Union College. Income from this fund will be used to finance grants-in-aid under the college loan-grant program for students planning to enter the United Methodist ministry.

Andrew and Emma Elizabeth Edinger Memorial Fund.—This fund was established by the late Mr. Joseph Edinger in memory of his mother and father. The fund has been increased by other members of the family and the income designated for use in the maintenance of campus buildings.

W. Glover Giles Memorial Fund.—Mr. W. Glover Giles of Louisville, Ky., a trustee of Union College, established an endowment fund by gifts during his lifetime and by a bequest. Income from this fund is used to fund Honor Scholarships at Union College.

Anna E. and John William Harris Memorial Fund.—Dr. J. William Harris has established a lectureship fund containing the sum of $30,000 in memory of his sister, Anna E. Harris, and his father, John William Harris.

Charles and Leona Jennings Memorial Funds.—Dr. Charles M. Jennings of Marietta, Georgia, has established an endowment fund in memory of his parents, Charles and Leona Jennings, the income from which is to be used to provide an annual bonus to the head of the Department of Biology at Union College.

William Jones Endowment Fund.—Mr. William Jones of Barbourville, Kentucky, has established a fund, which may be augmented from time to time, the income from which is designated for use by the School of Music to purchase recordings and musical scores.

Jeffrey Kronk Memorial Endowment.—This endowment, established by the Senior Class of 1967, in memory of Jeffrey Kronk, a member of that class, will assist in purchasing books for Union College's Lincoln-Civil War Collection.

Francis Landrum Memorial Professor of Religion and Philosophy.—Mrs. Obed H. Wilson has established the Francis Landrum memorial professorship through a bequest of $50,000 in 1927.

Dorothy Lucas Memorial Fund.—An endowment fund has been established in memory of Miss Dorothy Lucas, registrar of Union College for many years and beloved friend of students. The income from the fund is used to support various student-aid activities of the college.

Melanie Jean Martin Trust Fund.—Dr. and Mrs. O. J. Wilson of Bowling Green, Kentucky, have established a memorial fund in memory of their granddaughter. The income from the fund is used to purchase library books to support the work of the English Department.

John and Minnie B. McGaffee Trust Fund.—Dr. and Mrs. O. J. Wilson of Bowling Green, Kentucky, have established the John and Minnie B. McGaffee Trust Fund for the purpose of providing financial assistance to worthy and needy preministerial students. The income may be used for grants or loans, with preference being given to students from the Appalachian Region of Kentucky.

Pearl Sinnett Meyer Memorial Fund.—The Rev. Dr. Jesse I. Meyer has established an endowment fund in memory of his wife, Mrs. Pearl Sinnett Meyer. The income from this fund is designated for the purchase of books for the Union College library.

Emory Evan Peter Memorial Endowment.—The late Mrs. Laura P. Dickey of Louisville, Kentucky, established an endowment fund in memory of her brother, Emory Evan Peter. The income from this fund will be used to help finance the college student-aid program.

Lewis Ogden Stiles Endowment Fund.—The late Mrs. Lewis Ogden Stiles of Waco, Texas, established this fund to memorialize her husband, Lewis Ogden Stiles, and his first wife, Pearl Long Stiles, both faithful United Methodists of Irvington, Kentucky. The income from this fund will be used to finance grants-in-aid under the college loan-grant program to United Methodist students planning to enter the ministry of the Kentucky or Louisville Annual Conferences.

Willson-Gross Lectures.—The late Dr. and Mrs. James Willson of Floydada, Texas, established a lectureship endowment in memory of Dr. and Mrs. John Owen Gross. The purpose of the lectures is to bring annually to the campus distinguished speakers to discuss vital issues confronting the Christian student.

Beverly P. and Mossie B. Wilson Trust Fund.—Dr. and Mrs. O. J. Wilson of Bowling Green, Kentucky, have established a memorial fund in memory of Dr. Wilson's mother and father. The first $100 income from the fund shall be used to support the annual "Beverly P. and Mossie B. Wilson Memorial Award in English." Income in excess of $100 shall be used for a revolving loan fund for students majoring in English.

Colutha J. Taylor Wright Memorial Fund.—Mr. J. S. Wright of Whitley City, Kentucky, has established an endowment fund in memory of his wife, Mrs. Colutha J. Taylor Wright. The initial sum was $1,000.

Awards

Alpha Psi Omega Award (National Dramatics Honor Fraternity); an Oscar to the male and an Oscar to the female who has contributed most toward drama at Union College, as selected by members of the Fraternity.

Art Club Award to the art judged most outstanding during the year.

The Bartlett Sociology Award in memory of Mrs. Ellen Sabina Bartlett of Iowa Falls, Iowa, to the student showing the greatest excellence in the field of sociology.

Senior Biology Award, by Dr. Theodore R. Davies, to the senior student showing the highest academic excellence in the field of biology.

Blackwell Memorial Award in Political Science, by the late Dr. Robert Lee Blackwell in memory of his mother, Mrs. Victoria Wolfe Blackwell, to the senior majoring in history and/or political science showing the highest academic excellence in the field of political science.

Erwin S. Bradley History and Political Science Award by Sherman Oxendine to the senior with a major in history and minor in political science who has the highest scholastic average in grades earned at Union College.

Kathy Brick Memorial Award, by her parents, Mr. and Mrs. Theodore F. Brick, Dayton, Ohio, to the student showing the highest proficiency in competitive swimming.

The Burke Mathematics Award, in memory of Dr. A. R. Burke, of Binghamton, New York, to the student showing the greatest excellence in the field of mathematics, by Mrs. A. R. Burke.

The Chemistry Department Awards, in General Chemistry, Analytical Chemistry, Organic Chemistry, and Physical Chemistry. The award is given to the student who has completed the year course with the best all-around average. Awards are furnished by the Chemistry Department faculty.

The Daniel Drinkard Memorial Award, by students of Union College and friends, through the Alumni Association of Union College, to the runner-up for the Athlete of the Year, the athlete who exemplifies the characteristics of desire, kindness, honesty, and personal integrity, as embodied in his personality and attitude. The award shall be presented each year at the Athletic Banquet and shall be in the form of a plaque kept in the trophy case in the Physical Education Building; a miniature plaque shall be given to the recipient of the award.

Eastern Kentucky Essay Award, by Dr. Kenneth H. Tuggle, trustee of Union College, to the student writing the best essay on Eastern Kentucky history.

Freshman Composition Award, by Dr. and Mrs. William B. Bjornstad, formerly of the faculty of Union College, to the student achieving highest writing excellence in freshman composition courses as determined by the English Department.

Gamma Beta Phi Award, a book, to the full-time student with the highest cumulative average in hours earned at Union College. In case of a tie, the award will go to the student with the greatest number of hours.

Dr. L. A. Geiss Award to the graduating senior majoring in business with the highest cumulative standing in that field.

Mrs. L. A. Geiss Award, to the student majoring in the Department of Home Economics achieving the highest academic standing in that field for the year.

Governor James D. Black Award, by the late Pitzer D. Black, to the senior with the highest scholastic average for the year.

Hubert H. Hoeltje Memorial Award, a copy of a book by the late Hubert H. Hoeltje (Professor of American Literature at Union, 1961-1968) to the undergraduate student who, in the judgment of the Head of the Department of English, has done the most perceptive work, in class and in written reports, in that field during the current academic year.

Iota Sigma Nu Awards to the freshman and the sophomore students with the highest scholastic average in their respective classes for the year.

The Laws and Esten Parks Award by Mr. S. Laws Parks, former vice president for business affairs of Union College, and Mrs. Parks, presented annually to the preministerial senior with the highest cumulative academic standing.

Literature Award, by the Tuesday Club of Barbourville, Kentucky, to the senior majoring in English who shows the greatest excellence in the field of literature.

Samuel A. Matthews Memorial Award, a book given by Robert D. Matthews to a preministerial student.

Dr. Paul Muncy Memorial Award, by the Board of Trustees, to the senior premedical student with the highest cumulative academic standing.

The School of Music Faculty Award, to a student majoring in music for interest, initiative, cooperation, musical ability, academics, and service to the department.

Student National Education Association Award, given by the John Owen Gross chapter to the graduating senior showing the greatest excellence in the field of education.

H. H. Owens History Award, by Mrs. H. H. Owens, to the student showing the greatest excellence in the field of history.

The H. B. Jones Business Enterprise Award, in memory of H. B. Jones, an attorney in Pineville and Louisville, Kentucky, whose business interests included coal mining, railroading, and construction. The $50 award is given to a student who, in the judgment of the Scholarship Committee of the faculty, has shown initiative and enterprise in the field of business.

President's Award by President Mahlon A. Miller to the senior who has the highest cumulative record in grades earned at Union College.

The Physical Education Faculty Award to the man and woman senior majors with the highest cumulative academic standing.

The Physics Award, by the Physics Faculty to the student showing the greatest excellence in general physics.

Sampson Political Science Award, by the late Governor Flem D. Sampson, to the junior showing the highest academic excellence in the field of political science.

The Hattie Stanberry Ecology Award, in memory of Miss Hattie Stanberry, a graduate of the Union College Academy and faculty member of the college in 1909-1910, who later became Mrs. H. B. Jones. The $50 award is given to the student or organization that, in the judgment of the Scholarship Committee of the faculty, has made a contribution to environmental improvement in the academic year.

The Thomas Storrar Memorial Award-Scholarship.—This annual cash award or scholarship is to be given to a student on Honors' Day who exemplifies the honesty, concern, and personal commitment to the Union College community which was displayed by the late Mr. Tom Storrar, who was employed by the ARA Food Services at Union College. Circle-K Fraternity has initiated this fund.

Katherine V. Sutphen Memorial Award, by the Alumni Association of Union College, to the music student who has used his talents best during the year in serving Union College.

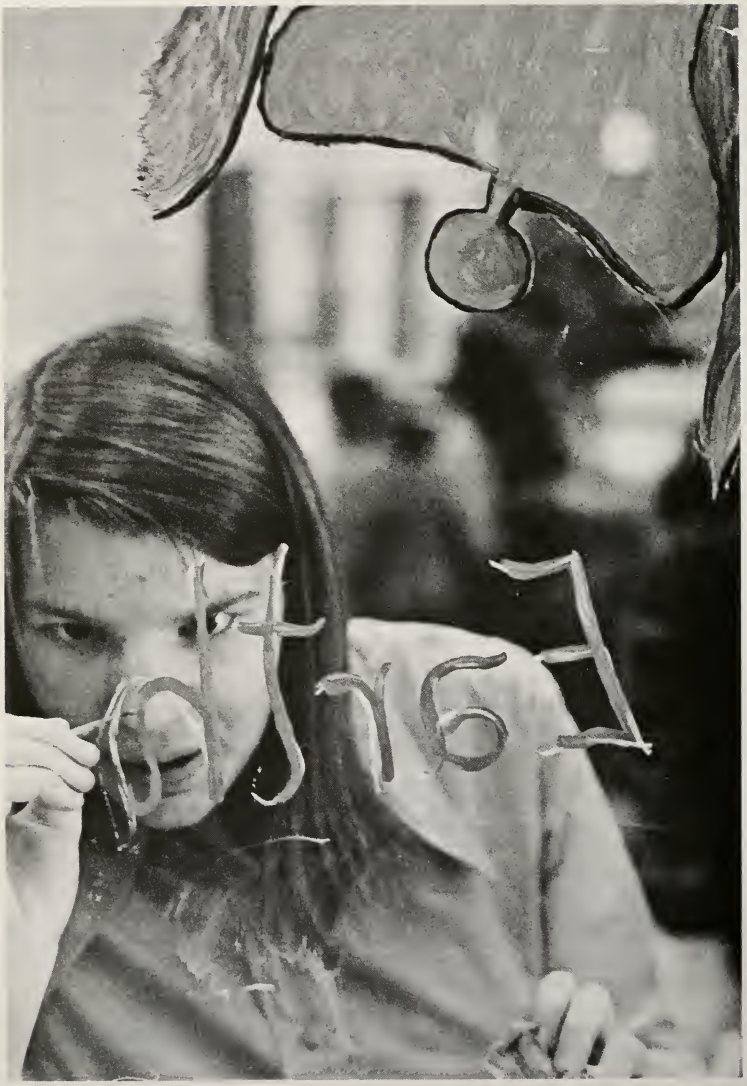
Judge W. W. Tinsley Family Memorial Award, by the late Mrs. Mayo Tinsley Rathfon, to the junior or senior preparing for a legal career showing the greatest promise for future success.

Union College Faculty Award, to the Varsity Letterman with the highest scholastic average for the year.

Beverly P. and Mossie B. Wilson Memorial Award in English, by Dr. and Mrs. O. J. Wilson to the student majoring in English with the highest cumulative grade point standing who has completed three full years of residence at Union College.

Cecil H. Wilson Award to the junior with the highest scholastic average for the year.

John Henry Wilson Award, given in memory of Mr. John Henry Wilson, former member of Congress from Barbourville, by his granddaughter, Mrs. Guy D. Attkisson, Jr., of St. Petersburg Beach, Florida, to the sophomore from the Fifth Congressional District of Kentucky who has the highest scholastic average for the year.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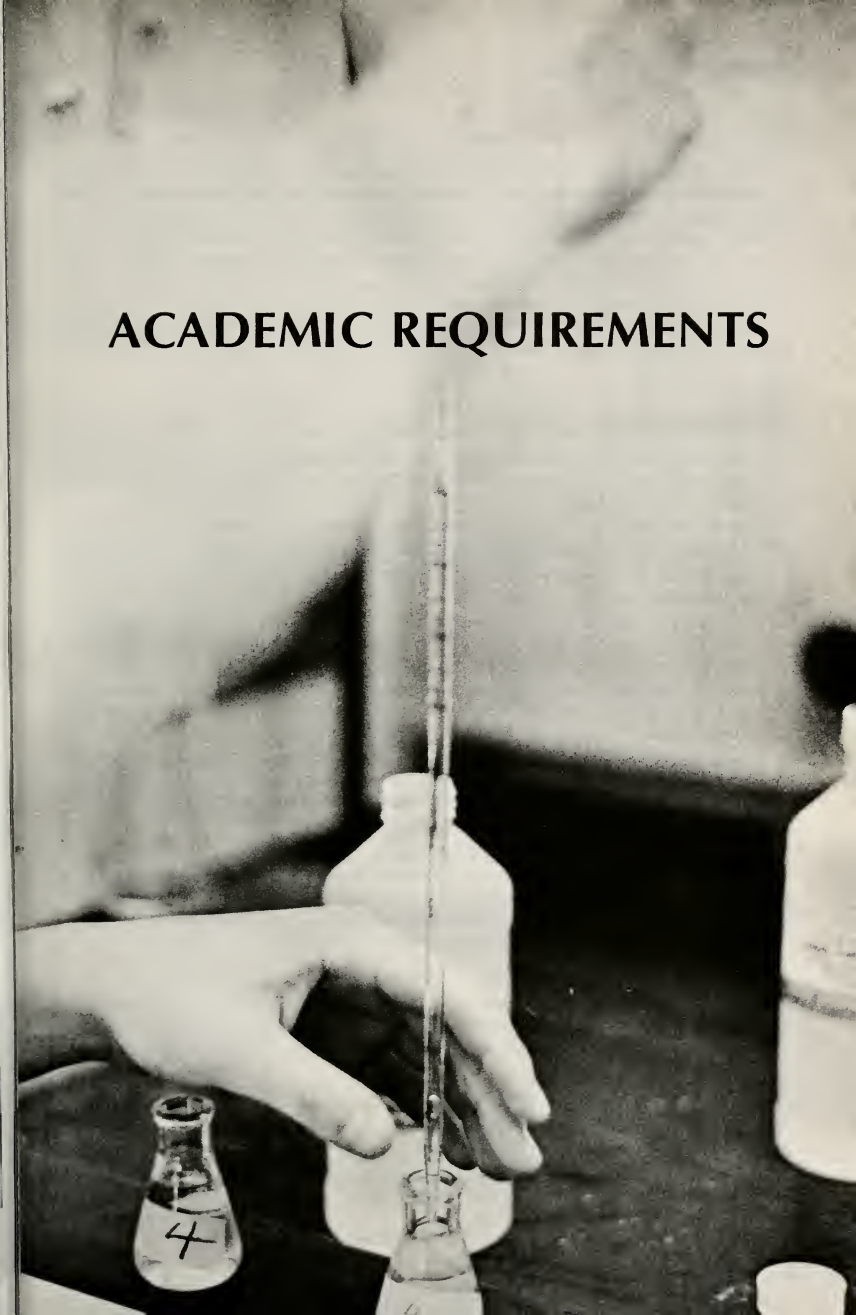
ACADEMIC REQUIREMENTS



Student Load

The normal undergraduate student load is sixteen semester hours per semester. Students who have an average academic standing may register for a maximum of eighteen semester hours credit per semester. Students who attain a "B" average are permitted to earn up to twenty-one semester hours per semester. Exceptions must be approved by the Division Chairman of the student's major.

The January Interim may be considered as part of the Fall Semester for tuition purposes at the student's option—i.e., the student may restrict his Fall load to a maximum of 14 hours and pay no tuition for the January term. This option is available only to full-time students.

The maximum load in each summer term is generally six semester hours. Students whose cumulative grade point average is "B" or better may request permission from the Division Chairman to take seven hours a term.

Class Attendance

1. Class attendance is required. Each student is responsible for all work from the first day of class and is expected to attend all meetings of the class for which he is registered. This is regarded as a matter of individual student responsibility.
2. All faculty members are expected to keep accurate records of class attendance.
3. Class absences due to circumstances beyond the control of the student will be excused by the teacher involved if request is made within one week of return to the campus. Class work or tests in these classes must be made up.
4. Class work and tests missed due to illness of the student can be made up only when the student presents the teacher with an excuse card signed by the College Nurse, within one week after he returns to class.
5. Class work and tests missed by a student while he is participating in an activity sponsored by Union College may be made up only when the faculty sponsor of such an activity signs the official absence list of students.
6. **A student is not automatically withdrawn when he stops attending a class.** Official withdrawals are made only on forms provided by the Registrar's Office. It is the student's responsibility to complete this form, obtain the signatures needed, and return it to the Registrar's Office.

Examinations and Reports of Marks

Examinations are held at the close of each semester. Tests are held at such times during each semester as the instructors may determine. Final marks are reported by the instructors to the Registrar. A copy of this report is given to the student, and a copy is sent to his parents if the student requests such action. Only final marks become a part of the permanent record.

The Marking System and Quality Points

Marks are reported in letters as follows:

A — Represents distinctly superior work, valued at four quality points for each semester hour.
B — Represents above average work, valued at three quality points for each semester hour.
C — Represents average work, valued at two quality points for each semester hour.
*Cr — Indicates that a course has been passed satisfactorily.
D — Represents inferior but passing work, valued at one quality point.
F — Indicates failure with 0 credits and 0 quality points for each semester hour.
W — Indicates that a student withdrew during the first nine weeks of the semester.
I — Indicates that in the opinion of the instructor the student has not been able to complete the required work of the course on time due to unavoidable circumstances.

An "I" received at the end of any semester must be removed before the end of the next semester if the student is enrolled for that term. If the student is not enrolled, the "I" must be removed before the end of the 12-month period following the date on which the "I" was received. Any exceptions to the time limit must be made by agreement of the instructor, division chairman, and registrar. If an "I" is not removed within that time limit, it remains on the permanent record and cannot be made up.

A student who does not take final examinations at the end of a semester will be given temporary registration in the next semester within the time allowed for registration. All final examinations for courses which are prerequisite to courses in which the student may be enrolled the next semester must be taken by the end of the registration period. Failure in any of these prerequisite courses will cancel the student's enrollment in the advanced course.

Quality Point Standing

The quality point standing of a student is determined by dividing the total quality points which he has earned by the total number of semester hours for which he has registered minus the number of hours of Cr and Incomplete on his record.

Honor Students

Union College recognizes excellent scholarship in two ways— the Academic Honors list and graduation with honors. The Semester Honors List is comprised of those students completing at least 12 hours of graded work with a 3.00 standing, no incompletes, and at least a 2.50 overall average.

Probation

Students falling below the following grade point average will be placed on Academic Probation:

Freshmen	1.70	Juniors	1.90
Sophomores	1.80	Seniors	2.00

If a student continues on probation for more than 2 semesters he will be ineligible for Union College aid, be limited to a maximum load of 12 hours, and be permitted to take only repeats of courses with D or F grades to raise his grade point average, or dismissed from the college by the Academic Standing Committee.

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*Students may take two courses per calendar year (June through May) on a Credit/non-Credit basis. Only two courses may be taken in a single discipline. A student must apply in the Registrar's Office for Cr/non-Cr before the last date for withdrawing from a course. When the instructor turns in a letter grade at the end of the semester, a D or above will be recorded as Cr.; and F will not be recorded at all, but the student loses the credit hours. This Cr/non-Cr option encourages students to take courses they otherwise might not attempt. The semester hours earned by Cr count, but no quality points are earned.

Suspension

Union College will not accept any credits earned at another institution while a student is under academic or disciplinary suspension from Union College.

Proficiency Examinations

With the consent of a professor, a student may take an examination and if the score is satisfactory, the normal semester hours of credit will be granted. Only credit may be earned by examination; no quality points are earned. Union College is also a regional testing center for the College-Level Examination Program, which provides credit for material mastered through self-study or unaccredited classes (See Special Programs section).

Extension and Correspondence

Any student planning to graduate from Union College must receive permission from the Registrar to register for correspondence or extension courses. Credits cannot be recorded unless prior arrangements are made.

Students enrolled for a full-time program of study shall defer work on all correspondence and extension courses during the term for which they are registered.

Not more than twelve semester hours of correspondence or extension work done in one academic year will be accepted by the College. Not more than one-fourth of the courses in a major may be completed by extension. Not more than thirty-two semester hours of extension and correspondence credit will be accepted toward a degree.

Not more than six semester hours extension or correspondence may be accepted during the senior year. Students with sixty semester hours or fewer at Union may offer six semester hours non-residence in the last thirty-six; students with sixty-one semester hours or more may offer six semester hours out of the last twenty-four.

Failures or quality point deficiencies in any course done in residence cannot be removed by extension or correspondence work.

Graduating seniors must complete any correspondence work needed for graduation at least three weeks before the date of Commencement.

Graduation Requirements

Requirements for Graduation—Bachelor of Arts Degree, Bachelor of Science Degree, and Bachelor of Music Degree (See Music Section).

The candidates must satisfy the following requirements:

1. Minimum of 128 semester hours. Thirty of the last thirty-six must be earned in residence at Union College. Students who have earned as many as sixty-one semester hours at Union College may graduate with only eighteen of the last twenty-four hours earned in residence. At least forty semester hours must be in courses numbered 300 and above.
2. Quality point standing of 2.00 overall and at Union, and in all courses taken in the major or minor fields.

3. Completion of the following General Requirements:

   I. English Composition — 6 hours

   II. Humanities: — 18 semester hours

   Approved courses in art; drama and speech; music; foreign language; religion; philosophy; English language and literature (other than English 355).

   III. Social Science: — 9 semester hours

   History; political science; psychology†; sociology; economics; geography.

   IV. Natural Sciences: — 8 semester hours

   Biology; chemistry; mathematics; physics; general science.

   V. a. In II and III no more than six hours may be taken in any one discipline. In IV all eight hours may be taken in one discipline.

   b. Hours taken for a first major may not be counted toward the Group Requirements.

   c. Students taking a 48-semester hour area may count the area hours toward the Group Requirements.

   VI. Courses marked * in the catalog meet these requirements.

4. For the Bachelor of Arts degree, two years of a foreign language offered by the college are required plus other graduation requirements. Students who have had a foreign language in high school should apply to the Head of the Department of Languages in regard to placement.

   Students who have had the equivalent of two years of foreign language at another college should see the Head of the Language Department about the requirements in language for graduation from Union.

5. For the Bachelor of Science degree the student must meet all graduation requirements, including a major or area. A foreign language may or may not be required as determined by the individual discipline.

6. Union College offers a Bachelor of Music degree. See Music Section for these requirements.

7. Completion of either:

   a. A major as determined by the faculty of the individual discipline.

   Majors are offered in Accounting; Applied Music; Art; Biology; Business Administration; Business Education; Chemistry; Community Health; Drama and Speech; Elementary Education; English; Health Education; History; Home Economics (non-vocational); Mathematics; Music Education; Philosophy; Physical Education; Physics; Psychology; Recreation; Religion; Secondary Education; Social Work; Sociology.

   Minors are offered in Accounting; Art; Biology; Business Administration; Chemistry; Computer Science; Drama and Speech; Economics; English; Health Education; History; Home Economics (non-vocational); Mathematics; Music; Office Administration; Philosophy; Physics; Political Science; Psychology; Recreation; Religion; Sociology.

   b. An area, the structure of which is determined by the faculty of the Division in which the area requirements are met.

   Areas are offered in Business, English, and Music.

8. At least forty semester hours offered for graduation must be earned in junior and senior courses (300 and above); at least six semester hours 300 and above, earned at Union, must be included in

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†Not acceptable as a Social Science in the Teacher Education Program.

any minor; at least nine semester hours 300 and above, earned at Union, must be included in any twenty-four hour major; at least twelve semester hours 300 and above (evenly distributed in the two fields if this is a combined major), earned at Union, must be included in a thirty hour major; at least eighteen semester hours 300 and above, earned at Union, must be included in an area.

9. At registration each senior must specify the tentative date on which he expects to graduate.
10. Advice in arranging schedules and choosing courses is always given gladly; however, each student is responsible for completing all requirements.

Associate Degrees

Union College offers Associate (two-year) degrees in Accounting; Computer Science; Medical Secretarial Administration; Office Administration; Recreation; Radiologic Technology and vocational education.

See the appropriate division section for detailed requirements.

Two-year degree programs are also under development in other subject areas.

Combined Degrees

The bachelor degrees may be granted to students who have completed three years of work at Union College and one year of work in an accredited professional school, with the following provisions:

1. The work in the professional school must continue the curriculum in which the student has been enrolled at Union College (pre-law, pre-dentistry, pre-medicine, etc.).

2. The student must have completed satisfactorily the minimum requirements for three years of pre-professional work at Union College (ninety-six semester hours with a quality-point standing of at least 2.00) and also the general college requirements for graduation, including the foreign language requirement if a B.A. is desired.

3. The student must have completed satisfactorily the minimum requirements for one year of study at the accredited professional school in which he is enrolled. The number of credits at the end of the four years of study must total at least 128 semester hours.

Degrees With Distinction

Honors in scholarship are recorded on the diplomas of the students earning them, and published on the Commencement program. There are three grades of honors designated respectively: *cum laude*, *magna cum laude*, and *summa cum laude*. These honors are conferred at graduation upon students who satisfy the following conditions of scholarship:

The honor of *cum laude* is awarded to those students who have earned an average standing of 3.0(B), overall and at Union.

The honor of *magna cum laude* is awarded to those students who have earned an average standing of 3.5 overall and at Union.

The honor of *summa cum laude* is awarded to those students who have earned an average standing of 3.8 overall and at Union.

Students coming from other colleges may receive general honors on completing 61 semester hours of resident study and satisfying the conditions of scholarship prescribed by the faculty, provided they furnish also such evidence of high scholarship in the institution from which they come as may, in the judgment of the faculty, entitle them to become candidates for honors under the regulations.

As a reward for excellence in scholarship and to promote diligence in study and encourage high ideals, the honorary scholastic fraternity of Iota Sigma Nu was founded on May 26, 1936. Membership is open upon election to:

(a) All who have met the requirements for graduation with honors.
(b) All students who have at least 74 hours with a 3.2 quality point standing or 100 hours with a 3.0 quality point standing and who have completed a minimum of two years in residence at Union College.

Planned Curriculum

At the beginning of the junior year, a planned curriculum will be developed by the Division Chairman at the student's request. This is a binding agreement between the college and student. Once the curriculum has been completed only changes approved by the Registrar are binding on the college.

Individualized Major

Students may elect to develop an individualized major not listed in the catalog. Regular general education requirements must be met and the planned program is developed for a specific reason or goal of the student. The program cannot be used for a waiver of prescribed courses in existing major fields.

The major must be arranged at least one year prior to graduation from Union College and be approved by the appropriate Division Chairman, the Vice President for Academic Affairs, and the Academic Policy Committee.

DIVISION PROGRAMS AND COURSE DESCRIPTIONS

"We can bury our heads in the sands of time or look to the horizons of the future, where the possibilities of growth and development are limited only by our imagination."

Robert E. Rose
Vice President for
Academic Affairs

DIVISIONS OF INSTRUCTION

Division of Applied Science

Accounting
Business Administration
Business Education
Computer Science
Economics
Elementary Education
Health
Home Economics
Library Science
Office Administration
Physical Education
Recreation
Secondary Education
Special Education
Vocational Education

Division of Humanities

Applied Music
Art
Drama
English
Foreign Language
Music Education
Philosophy
Religion
Speech

Division of Natural Sciences

Biology
Chemistry
Environmental Studies
General Science
Mathematics
Physics

Division of Social Sciences

Geography
History
Political Science
Psychology
Social Work
Sociology

Undecided Majors

Students who have not made a vocational or professional choice will be assigned an advisor in the Career Counseling Office. Those who plan a general program leading to a professional degree program at a university not requiring a bachelor's degree for admissions should confer carefully with their academic advisors and schedule that program from the general education courses of the college.

Course Numbering System

Courses numbered 100 or 200 are intended primarily for lower division students and 300 and 400 level courses are generally reserved for upperclassmen. Freshmen or Sophomores desiring to enter 300 or 400 level courses should confer with the division chairman involved for permission to enroll. 500 level courses are restricted to graduate students.

Courses with hyphenated numbers (101-102) are used when the first semester is prerequisite to the second.

Interdepartmental Numbers

Some special numbers are reserved for specific types of courses or studies. They may be used in any department although they are not shown in the following pages under the specific listings.

001—099	Non-credit special interest courses.
281, 481, 581	"Special Topics" courses—classes developed on a one-time, or experimental basis, or a special innovative class.
282, 482, 582	Special workshops, credit or non-credit.
283, 483, 583	Television courses through Kentucky Educational Television Network
284, 484	January interim courses not listed under a regular catalog number
285, 485	Experiential Education—internships, cooperative work experience, and vocational work experience.
287, 487	Field Practicums in specialized areas.
495, 595	Independent Study—individual research on approved topics not found in traditional courses. May be repeated on different topics.
599	Graduate Thesis.

Special Notations

Each course description indicates the semester the course will be offered — (F) for Fall Semester, (S) for Spring Semester, and (Sum) for Summer Session.

Many regular year courses are offered in summer sessions but are not guaranteed offerings.

Courses indicated as being offered in "Even Years Only" are offered on an alternate year basis in academic years *beginning* with even numbers, as 1978-79 — "Odd Years Only" courses are offered on an alternate year basis in academic years *beginning* with odd numbers, as 1979-80.

Anatole France said, "The whole art of teaching is only the art of awakening the natural curiosity of young minds." We in education have a responsibility to young people to nurture curiosity, direct interest and sharpen appetites for information about the world around them.

Donald L. Calitri

Division of Applied Sciences

Donald L. Calitri, *Chairman*
Department of Business and Economics Department of Education
Department of Health, Physical Education, & Recreation

1. DEPARTMENT OF BUSINESS AND ECONOMICS

J. C. Newport, *Department Head*
Accounting — Business Administration — Business Education
Computer Science — Economics — Office Administration

BACHELOR OF SCIENCE DEGREES IN BUSINESS

In addition to the general college requirements, all candidates for the Bachelor's degree must complete the following courses and one of the major fields listed below:

Common Courses Required of All Candidates

		Semester Hours
B.Ad. 271	Principles of Marketing	3
B.Ad. 351	Principles of Finance†	3
B.Ad. 352	Principles of Management	3
B.Ad. 411	Business Law	3
Acct. 171-172	Principles of Accounting	6
Comp. Sci. 231	Intro. to Data Processing	3
Econ. 253-254	Principles of Economics	6
		27

Accounting Major

Acct. 341-342	Intermediate Accounting	6
Acct. 421	Cost Accounting	3
Acct. 441	Tax Accounting	3
B.Ad. 412	Business Law	3
	Choice of Computer Language	3
Off. Ad. 261	Office Machines	2
	Accounting Electives	6
		26

Business Administration Major

B.Ad. 372	Personnel Management	3
B.Ad. 401	Statistics	3
B.Ad. 451	Business Policy	3
Off. Ad. 302	Business Communication	3
	Choice of Computer Language	3
	Electives in Bus. & Economics	12
		27

†waived for Business Education majors.

Business Education Major (See Education Dept. for certification requirements)

		Semester Hours
Acct. 321	Payroll Accounting	2
B.Ed. 361	Methods of Teaching Bus. Subjects	3
B.Ad. 152	Business Mathematics	
or		3
Off. Ad. 301	Business English	
Off. Ad. 112	Typewriting	3
Off. Ad. 121-122	Elem. & Inter. Shorthand	6
Off. Ad. 302	Business Communication	3
Off. Ad. 331	Office Practice	4
		24

Office Administration Major

		Semester Hours
B.Ad. 152	Business Mathematics	3
Off. Ad. 112	Typewriting	3
Off. Ad. 211	Advanced Typewriting	3
Off. Ad. 121-122	Elem. & Inter. Shorthand	6
Off. Ad. 261	Office Machines	2
Off. Ad. 301	Business English	3
Off. Ad. 302	Business Communication	3
Off. Ad. 361	Office Management	3
		26

ASSOCIATE OF APPLIED SCIENCE DEGREES IN BUSINESS

The following two-year programs lead to the award of the A.A.S. degrees in the majors indicated. Union College provides a "career ladder" approach to learning in that students who complete these degrees may immediately apply the credits earned on the two-year degree toward a Bachelor's degree, or return to college later with the guarantee that the credits previously earned will apply toward the 4-year degree.

Common Courses Required of All Candidates

		Semester Hours
Eng. 111-112 or Eng. 110-111	English Composition	6
Acct. 321	Payroll Accounting	2
	Humanities General Requirement	3
Econ. 253	Principles of Economics	3
Bus. Ad. 152	Business Mathematics	3
		17

Accounting Major (AAS)

		Semester Hours
Acct. 171-172	Principles of Accounting	6
Comp. Sci. 231	Intro. to Data Processing	3
Off. Ad. 261	Office Machines	2
B.Ad. 411	Business Law	3
	Accounting Electives	6
	Nat. Science or Math General Reg.	4
	Humanities or Soc. Sci. Gen. Req.	6
	Business Electives	9
	Free Electives	8
		47

Computer Science Major (AAS)

		Semester Hours
Acct. 171-172	Principles of Accounting	6
Comp. Sci. 231	Intro. to Data Processing	3
Comp. Sci. 233	FORTRAN Programming	3
Comp. Sci. 235	RPG Programming	3
Comp. Sci. 237	COBOL Programming	3
Comp. Sci. 331	Systems Analysis	3
Comp. Sci. 333	Survey of Computer Systems	3
Math. 111	Algebra & Trigonometry	4
Bus. Ad. 401	Statistics	3
	Humanities or Soc. Sci. Gen. Req.	3
	Internship and/or Free Electives	13
		47

Office Administration (ASS)

		Semester Hours
Off. Ad. 111-112	Typewriting	6
Off. Ad. 121-122	Elem. & Inter. Shorthand	6
Off. Ad. 261	Office Machines	2
Off. Ad. 301	Business English	3
Off. Ad. 302	Business Communication	3
Off. Ad. 331	Office Practice	4
	Natural Science General Requirement	4
	Humanities or Soc. Sci. Gen. Req.	3
	Business Elective	3
	Free Electives	13
		47

Medical Secretarial Administration (AAS)

		Semester Hours
Off. Ad. 111-112	Typewriting	6
Off. Ad. 121-122	Elem. & Inter. Shorthand	6
Off. Ad. 261	Office Machines	2
Off. Ad. 301	Business English	3
Off. Ad. 302	Business Communication	3
Off. Ad. 331	Office Practice	4
Biol.	Medical Terminology	2
Health 340	Anatomy & Physiology	4
Health 231	First Aid & Safety	3
Health 280	Personal & Community Health	3
	Free Electives	11
		47

Home Economics — Office Administration (AAS)

(See Home Economics section of Department of Education for requirements)

DIPLOMA IN OFFICE ADMINISTRATION (One Year Program)

		Semester Hours
Eng. 110 or 111	English Composition	3
Off. Ad. 111-112	Typewriting	6
Off. Ad. 121-122	Elem. & Inter. Shorthand	6
B.Ad. 151	Introduction to Business	3
Off. Ad. 261	Office Machines	2
Off. Ad. 301	Business English	3
Off. Ad. 331	Office Practice	4
Acct. 171	Principles of Accounting	3
Acct. 321	Payroll Accounting	2
		32

MINORS AVAILABLE TO ALL STUDENTS

Accounting

Eighteen semester hours in accounting and three hours in Business Law.

Business Administration

Accounting 171-172, Business Administration 352 and 411, Computer Science 231, and Economics 253, and three hours Business elective.

Computer Science

Accounting 171-172 and 15 hours of computer science courses.

Economics

Twenty-one hours chosen from Economics courses or Business Administration 351, 401, Sociology 251, History 241.

Office Administration

Twenty-one hours including Office Administration 112, 122, 261, 301, 331, and six hours elective Office Administration.

ACCOUNTING

Accounting 171-172. Principles of Accounting. **(F,S)** *Three hours each*
Procedures in journalizing, posting, financial statements, adjusting and closing entries, controlling accounts, and the voucher system.

Accounting 321. Payroll Accounting. **(F)** *Two hours*
The Social Security Act and other laws relating to the payment of wages and salaries, the preparation of state and Federal tax returns, and the use of data processing in payroll accounting.

Accounting 341-342. Intermediate Accounting. **(F,S)** *Three hours each*
Financial statements, working capital, investments, plant and equipment, stockholders' equity, analytical processes. *Prerequisite:* Accounting 172.

Accounting 421. Cost Accounting. **(S)** *Three hours*
Methods of assembling cost data for materials, labor, and overhead consumed in a manufacturing enterprise. *Prerequisite:* Accounting 341.

Accounting 422. Auditing. **(F)** *Three hours*
Verification, analysis and interpretation of accounting records. *Prerequisite:* Accounting 341.

Accounting 441. Tax Accounting. **(S)** *Three hours*
Problems of accounting for all types of federal, state, and local taxes.

Accounting 442. Advanced Accounting. **(F)** *Three hours*
Accounting for partnerships, joint ventures, installment sales, consignments, home office and branch units, consolidated income statements, balance sheets, and surplus statements. *Prerequisite:* Accounting 342.

BUSINESS ADMINISTRATION

Business Administration 151. Introduction to Business. **(F)** *Three hours*
Forms of business ownership, marketing, personnel management, finance, and government regulations.

Business Administration 152. Business Mathematics. **(S)** *Three hours*
Fundamental processes involving percentage, interest, discount, payroll, taxes, and financial statements.

Business Administration 271. Principles of Marketing. **(F)** *Three hours*
Study of the movement of goods from producer to consumer and an examination of the functions of the marketing process, marketing institutions, channels of distribution, legal aspects, and policy consideration.

Business Administration 272. Salesmanship. (S) *Three hours*
The interpretation of sales techniques and methods, prospective customers, interviews, sales presentation, demonstration, closing the sale.

Business Administration 351. Principles of Finance. (F) *Three hours*
Basic principles of finance including monetary and credit systems, the demand for funds in the capital market, factors affecting the supply of funds, and monetary and credit policies.

Business Administration 352. Principles of Management. (F) *Three hours*
The development of organization plans and policies, development of industrial relations, management operation with emphasis on skills and techniques of leadership.

Business Administration 371. Insurance. (S) *Three hours*
Insurance contracts and the fields of insurance including fire, marine, casualty, social, disability, life and property. (Odd years only).

Business Administration 372. Personnel Management. (S) *Three hours*
Supervision of employees, policies relating to effective utilization of human resources in business concerns. *Prerequisite:* B.Ad. 352.

Business Administration 401. Statistics. (F) *Three hours*
A study of the mathematics involved in statistical analysis and the effective use of statistical data in decision making.

Business Administration 411-412. Business Law. (F-S) *Three hours each*
Laws dealing with contracts, agency, employment, bailment, transportation, real and personal property, leases, and bankruptcy.

Business Administration 451. Business Policy. (S) *Three hours*
Analysis of management problems, formulation of alternative courses of action, determination of policy decisions. *Prerequisite:* B.Ad. 352

BUSINESS EDUCATION

Business Education 361. Methods of Teaching Business Subjects. (on demand) *Three hours*
Methods, materials, and techniques used in the teaching of bookkeeping, typewriting, shorthand, and general business subjects.

COMPUTER SCIENCE

Computer Science 231. Introduction to Data Processing. (F) *Three hours*
Survey of basic computer concepts, hardware, and operations; introduction of basic programming concepts and documentation standards used in various programming.

Computer Science 233. FORTRAN Programming. (F) *Three hours*
A study of the FORTRAN IV programming language on the NCR Century 50 computer including evaluation, flowcharting, and solution of problems that are adaptable to business and/or science.

Computer Science 235. RPG Programming. (S) *Three hours*
A study of the RPG programming language on the NCR Century 50 computer oriented toward problems and reports related to business applications.

Computer Science 237. COBOL Programming. (S) *Three hours*
A study of COBOL, a high level programming language which is adaptable to most business applications of any magnitude. (Even years only).

Computer Science 331. Systems Analysis. (F) *Three hours*
A study in the analysis and organization of a system which can be adapted to a complete practical application. Students must be able to utilize concepts learned in the related computer science courses to accomplish this. (Even years only).

Computer Science 333. Survey of Computer Systems. (S) *Three hours*
A comparative study of the various computer systems available, such as IBM, Honeywell, Univac, NCR, Mini Computer. (Odd years only).

ECONOMICS

Economics 253-254. Principles of Economics. **(F-S)** *Three hours each*
Elementary economic theory of prices, national income, production, and employment.

Economics 353. Consumer Economics. **(S)** *Three hours*
The role of the consumer in handling this money. (Odd years only).

Economics 363. Money and Banking. **(F)** *Three hours*
National banking system, nature and functions of money, the importance of credit, bank deposits, and loans. *Prerequisite.* Econ. 253.

Economics 403. Labor Economics. **(F)** *Three hours*
The labor market, wage and labor problems and theories, development of labor unions, wage and labor policies. (Even years only).

Economics 404. Investments. **(S)** *Three hours*
Public and corporate securities, security markets, investment policies and tax problems. (Even years only).

The following courses may be counted as Economics:
History 241. American Economic History.
Sociology 281. Current Socio-Economic Problems.
B.Ad. 401. Statistics.

OFFICE ADMINISTRATION

Office Administration 111-112. Typewriting. **(F-S)** *Three hours each*
A student with one or more high school units in typewriting cannot take Office Administration 111 for credit.

Office Administration 121. Elementary Shorthand. **(F)** *Three hours*
Principles of Gregg Shorthand, Diamond Jubilee Series. A student with one or more high school units in shorthand cannot take Office Administration 121 for credit. *Prerequisite:* Office Administration 111 or concurrent with Office Administration 111.

Office Administration 122. Intermediate Shorthand. **(S)** *Three hours*
Continuation of Office Administration 121.

Office Administration 211. Advanced Typewriting. **(S)** *Three hours*
Applying typewriting skill to practical on-the-job activities. *Prerequisite:* Office Administration 112 or equivalent.

Office Administration 221. Dictation and Transcription. **(S)** *Three hours*
Emphasis placed on speed in taking dictation and in transcribing notes. *Prerequisite:* Office Administration 122 or equivalent.

Office Administration 261. Office Machines. **(F)** *Two hours*
Skill building in the use of common office machines.

Office Administration 301. Business English. **(F)** *Three hours*
Using words effectively, language structure, punctuation.

Office Administration 302. Business Communication. **(S)** *Three hours*
The methods and techniques of organizing business letters, memoranda, and reports with intensive writing practice, in-class analysis, and student evaluation.

Office Administration 331. Office Practice. **(S)** *Four hours*
The development of office proficiency. Laboratory required.

Office Administration 361. Office Management. **(S)** *Three hours*
Office building, equipment, personnel supervision, control of office activities. (Even years only).

2. DEPARTMENT OF EDUCATION

Education — Home Economics — Special Education — Vocational Education

Application for Admission to Teacher Education Program. Formal application for admission to the Teacher Education Program is to be made with the Head of the Department of Education. It is desirable that the students apply during the second semester of the sophomore year.

A grade point average of 2.00 is required for admission to the Teacher Education Program. A bulletin listing other criteria and the procedure for admission to the program, as well as to student teaching, may be secured from the office of the Head of the Department of Education.

Application for admission to the Teacher Education Program does not include an application for student teaching. A separate application for admission to student teaching must be filed with the supervisor of Student Teaching one full semester in advance of the time the Student Teaching is requested.

The requirements listed in this section apply to students who entered in the fall of 1975 and thereafter. Students enrolled before 1975 and graduating before 1980 will complete the program under which they began.

ELEMENTARY EDUCATION CURRICULUM*

I. General Education
- A. English Composition ..... 6 semester hours
- **B. Humanities ..... 18 semester hours
  Three semester hours must be in Literature; remaining hours to be taken from the following: Art; Drama and Speech; Music; Foreign Languages; Religion; Philosophy; English Language and Literature (other than English 355).
- C. Mathematics and Natural Science ..... 12 semester hours
  Biology, Chemistry, Mathematics, Physics, General Science. At least 3 semester hours shall be in the field of Physical Science and at least 3 semester hours shall be in the field of Biological Science.
- **D. Social Science ..... 12 semester hours
  History; Economics; Political Science; Sociology.
- E. Health and Physical Education in Elementary School ..... 3 semester hours

II. General Requirements
- A. Social Science ..... 3 semester hours
- B. Introduction to Psychology ..... 3 semester hours
- C. Children's Literature ..... 3 semester hours
- D. Structure of the Number Systems ..... 6 semester hours
- E. Elementary School Art ..... 3 semester hours
- F. Elementary School Music ..... 3 semester hours

III. Professional Preparation***
- A. Education 241—Introduction to Education ..... 3 semester hours
- B. Education 341—Methods of Teaching Math ..... 3 semester hours
- C. Education 351—Human Growth & Development ..... 3 semester hours
- D. Psychology 361—Psychology of Learning ..... 3 semester hours

*Curriculum meets the Kentucky State Department of Education guidelines.
**No more than 6 semester hours in any one discipline.
***An overall grade point average of 2.25 is required in courses listed under Professional Preparation as well as an overall grade point average of 2.25 in all courses completed before the student is eligible for student teaching.

E. Education 361—Reading in The Primary Grades .....3 semester hours
F. Education 362—Reading in The Intermediate Grades .....3 semester hours
G. Education 432—Methods and Materials in the Elementary School ....4 semester hours
H. Education 433, 434—Supervised Student Teaching in the Elementary School .....10 semester hours

SECONDARY EDUCATION CURRICULUM *

I. General Education
A. English Composition .....6 semester hours
**B. Humanities .....18 semester hours
Three semester hours must be in Literature; remaining hours to be taken from the following: Art; Drama and Speech; Music; Foreign Languages; Religion; Philosophy; English Language and Literature (other than English 355).
C. Mathematics and Natural Science .....12 semester hours
Biology, Chemistry, Mathematics, Physics, General Science. At least 3 semester hours shall be in the field of Physical Science and at least 3 semester hours shall be in the field of Biological Science.
**D. Social Science .....12 semester hours
History, Economics, Political Science, Sociology
E. Personal and Community Health .....3 semester hours
F. Introduction to Psychology .....3 semester hours

II. General Requirements for Students Preparing for Teaching in Secondary School.
Majors, Minors, and Areas of Concentration***
An Area of Concentration .....48 semester hours
One Major .....30 semester hours
One Major of 30 semester hours and one Minor of 21 semester hours .....51 semester hours

Majors in subject combinations shall require 36 semester hours credit. In a combination of subjects for majors, not less than 12 semester hours shall be in each subject within the major. Method courses shall be in addition to those in the majors and minors. Education 362 is required of students preparing to teach English.

III. Professional Preparation for Secondary Teacher****
A. Education 241—Introduction to Education .....3 semester hours
B. Education 351—Human Growth & Development .....3 semester hours
C. Psychology 361—Psychology of Learning .....3 semester hours
D. Education 452—Methods and Materials in the Secondary School .....4 semester hours
E. Education 453, 454— Supervised Student Teaching in Secondary Schools .....10 semester hours

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*Curriculum meets the Kentucky State Department of Education guidelines.
**No more than 6 semester hours in any one discipline.
***Choose one of the three (3) options listed.
****An overall grade point average of 2.25 is required in courses listed under Professional Preparation, and overall grade point average of 2.25 in all courses completed, and a overall grade point average of 2.25 in student's area, major, or minor before the student is eligible for student teaching.

EDUCATION

Education 241. Introduction to Education. **(F,S)** *Three hours*
The purpose and function of education. Classroom and school organization, guidance services, library services, evaluation, reporting to parents and other phases of the school program.

Education 341. Methods of Teaching Mathematics in Elementary School. **(F)** *Three hours*
Modern methods and materials for teaching mathematics in the elementary school. *Prerequisite:* Mathematics 203 or equivalent.

Education 351. Human Growth and Development. **(F)** *Three hours*
Basic concepts for understanding the development of the child and the adolescent. Includes observation. First and second semesters.

Education 361. Reading in the Primary Grades. **(F)** *Three hours*
Methods and materials for the teaching of reading in the primary grades including observations, micro-teaching demonstrations, making of lesson plans, and evaluation of a child's readiness.

Education 362. Reading in the Intermediate Grades. **(S)** *Three hours*
Emphasis on study skills, individualized programs and reading in the content subjects.

Education 401. Introduction to Counseling and Guidance. **(S)** *Three hours*
Educational, sociological, and psychological foundations of counseling and guidance in schools, colleges and related service oriented agencies. Essential counseling and guidance services, policies, practice and procedures.

Education 432. Methods and Materials in the Elementary School. **(F)** *Four hours*
Emphasis on language arts, social studies, and science; directed observation; *Prerequisites:* Education 241, 341, 351, 361, and 362; 90 semester hours college credit; quality point standing of 2.25 overall and at Union College; one semester residence; and admission to the Teacher Education Program at Union College. No late reigstration.

Education 433, 434. Supervised Student Teaching in the Elementary School.
(F,S) *Five hours each*
Laboratory experiences in working with children, teachers, and others in school and community. Supervision by a qualified classroom teacher for a period of 10 weeks. Transportation and meals paid by the students. Application to be made one semester in advance. *Prerequisite:* Ed. 432 & GPA of 2.25.

Education 435. Laboratory Experiences in Education. **(F,S, Sum)** *Five hours*
A subsitute for student teaching for elementary majors. Considers current problems and trends in teaching with laboratory periods for construction of classroom materials. *Prerequisites:* One year of successful classroom teaching experience; Education 241 and 432; scholastic standing of 2.25 or above; completion of 90 semester hours; approval by the Committee on Teacher Education; and one semester residence at Union College.

Education 436. Laboratory Experience in Education. **(F,S,Sum.)** *Five hours*
For elementary majors with same course content and prerequisites as 435 except that four or more years of successful classroom teaching experience must have been completed.

Education 441. Measurement and Evaluation. **(S,Sum)** *Three hours*
Instruments and techniques for evaluating abilities, aptitudes, personality traits, and interests will be examined and teacher-made evaluative instruments will be given special emphasis. Application of test results to vocational and educational guidance is to be stressed.

Education 452. Methods and Materials in the Secondary School. **(F,S)** *Four hours*
Current teaching methods, materials, and innovations in the secondary school with directed observations. *Prerequisites:* Education 241 and 351; 90 semester hours of college credit; quality point standing of 2.25 overall and at Union College; one semester of residence; and admission to the Teacher Education Program at Union College. In addition, a quality point standing of 2.25 or above is required in areas of concentration, major, and minors. No late registration.

Education 453, 454. Supervised Student Teaching in the Secondary School. **(F,S)** *Four or or five hours each*

Under the direction of an experienced teacher, the student teacher directs the usual teaching activities in the classroom for 10 weeks in local public schools. Application should be made one full semester in advance of the time the teaching is to be done. *Prerequisite:* Completion of Education 452 and 2.25 GPA.

Education 455. Laboratory Experiences in Education. **(F,S,Sum)** *Five hours*

A substitute for student teaching for secondary majors. Considers current problems and trends in teaching with laboratory periods for construction of classroom materials. *Prerequisites:* One year of successful classroom teaching experience; Education 241 and 452; scholastic standing of 2.25 or above; completion of 90 semester hours; approval by the Committee on Teacher Education; one semester of residence at Union College.

Education 456. Laboratory Experiences in Education. **(F,S,Sum)** *Five hours*

For secondary majors with same course content and prerequisities as 455 except that four or more years of successful classroom teaching experience must have been completed.

Education 495. Independent Study. **(F,S,Sum)** *Three hours*

Open only to advanced students in the field of Education who wish to do intensive reading in a specific interest area. *Prerequisites:* Twelve semester hours of Education and permission of the Head of the Department.

SPECIAL EDUCATION — LEARNING AND BEHAVIOR DISORDERS CURRICULUM*

I. General Education
- A. English Composition ..... 6 semester hours
- **B. Humanities ..... 18 semester hours
  Three semester hours must be in Literature; remaining hours to be taken from the following: Art; Drama and Speech; Music; Foreign Languages; Religion; Philosophy; English Language and Literature (English 355 may be counted for humanities credit for Special Education *only*)
- C. Mathematics and Natural Science ..... 12 semester hours
  Biology, Chemistry, Mathematics, Physics, General Science. At least 3 semester hours shall be in the field of Biological Science and at least 3 semester hours in the field of Physical Science.
- **D. Social Science ..... 9 semester hours
  History; Economics; Political Science; Sociology.
- E. Health and Physical Education in Elementary School ..... 3 semester hours

II. General Requirements
- A. Structure of the Number Systems ..... 6 semester hours
- B. Elementary School Art ..... 3 semester hours
- C. Elementary School Music ..... 3 semester hours
- D. Special Education 465G Environmental Design Systems ..... 3 semester hours

III. Professional Preparation***
- A. Education 241-Introduction to Education ..... 3 semester hours
- B. Education 341-Methods of Teaching Math ..... 3 semester hours
- C. Education 351-Human Growth & Development ..... 3 semester hours
- D. Psychology 361-Psychology of Learning ..... 3 semester hours
- E. Education 361-Reading in the Primary Grades ..... 3 semester hours
- F. Education 362-Reading in the Intermediate Grades ..... 3 semester hours
- G. Education 432-Methods and Materials in the Elementary School ..... 4 semester hours

H. Education 433, 434-Supervised Student Teaching in the Elementary School ..... 12 semester hours
I. Physical Education-420 Adaptive PE ..... 3 semester hours

IV. Special Education Core and Area
A. Special Education 365 Foundation in Education of Exceptional Children ..... 3 semester hours
B. Special Education 270 Field Experiments ..... 3 semester hours
C. Special Education 460 Characteristics of the Exceptional Child ..... 3 semester hours
D. Special Education 461 Curriculum Development for Elementary Exceptional Children ..... 3 semester hours
E. Special Education 462 Curriculum Development for Elementary Exceptional Children ..... 3 semester hours
F. Special Education 463 Speech and Learning Disorders ..... 3 semester hours
G. Special Education 470 Educational Assessment ..... 3 semester hours
H. Special Education 471 Prescriptive Teaching ..... 3 semester hours
I. Education 440 Introduction to Early Childhood ..... 3 semester hours

Special Education 270. Field Experiences with Children with Learning and Behavior Disorders. (S) *Three hours*
Exposure to private and public educational programs for exceptional children; experience in working with exceptional children on a restricted basis.

Special Education 365. Foundations of Education of the Exceptional Child. (S) *Three hours*
Etilogy and assessment of exceptional learning conditions; characteristics of exceptionalities; special education intervention.

Special Education 460. Characteristics of the Exceptional Child. (F) *Three hours*
A study of specific learning disorders resulting in discrepancy between potential and performance in academic tool areas. Emphasis placed on the classroom teacher's role in remediations.

Special Education 461. Curriculum Development for Elementary Exceptional Children. (S) *Three hours*
Curriculum needs of elementary exceptional children; materials and teaching methods.

Special Education 462. Curriculum Development for Secondary Exceptional Children. (S) *Three hours*
Curriculum needs of secondary exceptional children; materials and teaching methods; work-study programs; vocational and career education.

Special Education 463. Speech and Language Disorders. (S) *Three hours*
Etiology and symptomatology of speech and language disorders; therapeutic methods.

Special Education 465. Environmental Designs Systems. (F) *Three hours.*
Principles of environmental design control systems for school age children; alternative methods of classroom management utilizing operant methods.

Special Education 470. Educational Assessment of Children with Learning and Behavior Disorders. (S) *Three hours*
Administration and intrepretation of diagnostic instruments; assessment of learning and behavior traits of children with learning problems.

Special Education 471. Prescriptive Teaching for Children with Learning and Behavior Disorders. (S) *Three Hours*
The designing, implementation and evaluation of individualized programs based upon the educationally relevant characteristics of children with learning and behavior disorders.

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*Curriculum meets the Revised Kentucky State Department of Education Guidelines.

**No more than 6 semester hours in any one discipline.

***An overall grade point average of 2.25 is required in courses listed under Professional Preparation as well as an overall grade point average of 2.25 in all courses completed before the student is eligible for student teaching.

LIBRARY SCIENCE

Library Science 133. Information Aids to Learning. *One hour*
A study of the techniques and basic tools of information.

ASSOCIATE OF APPLIED SCIENCE IN VOCATIONAL EDUCATION (for vocational teachers)

	Credit hours
English 110 and 111 (or 111 and 112) Freshman Composition	6
Psychology 111 General Psychology	3
Speech 131 Fundamentals of Speech	3
Natural Science Core Requirement	4
Humanities Core Requirement	3
Social Science Core Requirement	3
Experience Credit for vocational certification	6-9
Vocational Education Block (from state approved school) (transfer)	24
Free electives	9-12
	64

ASSOCIATE OF APPLIED SCIENCE FOR GRADUATES OF STATE VOCATIONAL SCHOOLS

	Credit Hours
Credit for 22-month post high school vocational program	48
English 110 or 111 English Composition	3
Social Science Core Requirement	3
Natural Science Core Requirement	3
Humanities Core Requirement	3
Free Elective	3
	64

	Credit Hours
Credit for 11-month post high school vocational program	24
English 110 and 111 English Composition	3
Social Science Core Requirement	3
Natural Science Core Requirement	4
Humanities Core Requirement	3
Elective Credits (planned curriculum developed & followed)	27
	64

A "C" (2.00) average is required and a minimum of 15 hours in residence.

For the vocational student wishing to continue his/her education to the Bachelor's degree level, a planned course of study (contract) will be developed so that the degree can be earned with an additional 64 hours of specified credit beyond the A.A.S. degree.

Graduates of the 11-month vocational programs should plan additional hours of general education credits within their electives to better prepare for the 4-year degree.

HOME ECONOMICS

The curriculum is in general home economics with no specialization within the field.

The first two years will be accepted by certain institutions as two years toward the Smith-Hughes or Vocational Home Economics Program.

Union College has a written agreement with the University of Kentucky whereby Union College home economics graduates can obtain a vocational teacher's certificate and a master's degree in home economics education if the graduate meets the requirements of the College of Education at the University of Kentucky. See the suggested undergraduate program to prepare for joint vocational certification and graduate in home economics at the University of Kentucky.

Individual courses may be selected by a student majoring in other departments.

Requirements for a Major: Thirty semester hours in Home Economics in addition to Chemistry 111 and 112. At least eighteen hours must be taken in the Home Economics Department and must include 172, 212, 361, and 431.

Requirements for a Minor: Twenty-one semester hours in Home Economics. At least twelve hours must be taken in the Home Economics Department and must include 172 and 212.

Requirements for an Associate of Applied Science Degree in Secretarial Practice and Home Economics*

Freshman Year			Sophomore Year		
Course	**Fall**	**Spring**	**Course**	**Fall**	**Spring**
Freshman Composition	3	3	Social Science		3
Humanities		3	Natural Science	4	
Principles of Food Preparation	3		Principles of Nutrition		3
Meal Planning and Serving		3	Interior Design or		
Principles of Clothing Construction	3		Management of Family Resources	3	
Tailoring		3	Personal & Community Health	3	
Typewriting 111 or			Office Machines	2	
Business elective	3		Principles of Accounting	3	
Typewriting 112		3	Business Communications		3
Shorthand	3	3	Consumer Economics		3
			electives		4
Total hours	15	18	Total hours	15	16

Suggested undergraduate program to prepare for joint vocational certification and graduate program in Home Economics at the University of Kentucky.

I. General Education

Humanities — 27 hours

English Composition — 9 hours

Art — 6 hours to be selected from:

Art 132, Introduction to Art

Art 373-374, Art History

Literature — 3 hours to be selected from:

English 221-222, Survey of English Literature

English 341-342, Survey of American Literature

*Two year students may elect to receive the Associate in Arts or Associate in Science degree by completing the General Education requirements for the B.A. or B.S. degree.

Speech 131, Fundamentals of Speech — 3 hours
Electives — 6 hours (no more than 6 hours from any one discipline).

Natural Science — 12 hours
Biology — 4 hours
Chemistry 111-112, General Chemistry — 8 hours

Social Science — 15 hours
Psychology 111, Introduction to Psychology — 3 hours
Sociology — 3 hours
Economics — 3 hours to be selected from:
Economics 341-342, Principles of Economics
Electives — 6 hours (no more than 6 hours from any one discipline and does not include (Psychology).

Education — 6 hours
Education 241, Introduction to Education — 3 hours,
Education 351, Human Growth and Development — 3 hours

Health — 3 hours
Elective — 3 hours
Total General Education — 63 hours

Note: At least forty semester hours must be in courses numbered 300 and above.

II. Home Economics

Textiles and Clothing: — 9 hours
H. Ec. 211, Principles of Clothing Construction and Selection — 3 hours
H. Ec. 212, Tailoring — 3 hours
H. Ec. 401, Textiles — 3 hours

Management and Family Economics: — 10 hours
H. Ec. 341, Management of Family Resources — 3 hours
H. Ec. 431-432, Home Management & Family Relationships
Laboratory — 4 hours
Economics 353, Consumer Economics — 3 hours

Human Development and Family Relations: — 10 hours
Psychology 210, Child Development — 4 hours
Sociology 271, Marriage and the Family — 3 hours
H. Ec. 495, Child Guidance — 3 hours

Nutrition and Food Service — 9 hours
H. Ec. 171, Principles of Food Preparation — 3 hours
H. Ec. 172, Meal Planning and Service — 3 hours
H. Ec. 361, Principles of Nutrition — 3 hours

Housing and Interior Design: — 9 hours
Art 201, Art Fundamentals — 3 hours
H. Ec. 360, Household Equipment — 3 hours
H. Ec. 451, Interior Design — 3 hours

Health: — 3 hours
Health 280, Personal and Community Health — 3 hours
Total Home Economics — 50 hours

III. Electives — *15 hours*

Total Hours — 128 hours

Home Economics 171. Principles of Food Preparation. **(F)** *Three hours*
Elementary principles of food preparation; analysis of basic recipes; developing techniques in the kitchen; and use and care of kitchen equipment.

Home Economics 172. Meal Planning and Serving. **(S)** *Three hours*
Selecting, purchasing, preparing, and serving meals for various occasions. *Prerequisite:* Home Economics 171 or equivalent.

Home Economics 211. Principles of Clothing Construction and Selection. **(F)** *Three hours*
Selection of designs and fabrics; use of commercial patterns; techniques in fundamental construction process in making simple garments; and use of sewing machine.

Home Economics 212. Tailoring. **(S)** *Three hours*
Design in clothing and tailoring; the principles and practices involved in the tailoring of women's and men's coats and suits. Custom tailoring techniques used. *Prerequisite:* Home Economics 211 or equivalent. Second semester.

Home Economics 341. Management of Family Resources. **(F)** *Three hours*
Philosophy and concepts of home management. Study of the mechanics of time, energy, and money management in pertinent managerial areas. (Odd years only.)

Home Economics 360. Household Equipment. **(S)** *Three hours*
A study of the selection, arrangement, operation, care and demonstration of household equipment. (Odd years only.)

Home Economics 361. Principles of Nutrition. **(S)** *Three hours*
Diet problems; study of nutrients and their relationships to health.

Home Economics 401. Textiles. **(S)** *Three hours*
Textile fiber, yarns, and fabrics; their source, productions, manufacture, properties and identification. The selection, use, and care of modern textiles. (Even years only.)

Home Economics 431-432. Home Management and Family Relationships Laboratory. **(F,S)** *Two hours*
Each student is limited to four hours credit. A residence period in the Home Management House is required of seniors majoring in Home Economics. Experience in the application of principles presented in other courses. Admission by permission of the instructor.

Home Economics 451. Interior Design. **(F)** *Three hours*
Study of the major elements used in interior design emphasizing fabric and color schemes. Practical and aesthetic basis of design in the home. (Even years only.)

Home Economics 495. Independent Study. *Three hours*
The student selects a problem and works under the supervision of the instructor. Designed for the advanced student.

The following courses may count toward a home economics major or minor:

Art 201-202 Art Fundamentals
Psychology 210 Child Development
Sociology 271 Marriage and the Family
Health 280 Personal and Community Health
Education 351 Human Growth and Development
Economics 353 Consumer Economics

3. DEPARTMENT OF HEALTH, PHYSICAL EDUCATION & RECREATION

Paul S. Moore, *Department Head*
Health – Physical Education – Recreation

HEALTH

Students preparing to teach in an elementary or secondary school in Kentucky are required to complete the following courses: for an elementary certificate, Health and Physical Education in the Elementary School; for a secondary certificate, Personal and Community Health.

Requirements for a Major in Health Education: For students choosing to get a teaching certificate, thirty semester hours from the courses listed under the Health department including 280, 330, and 340. In addition to the courses listed under the Health department, the following courses may be taken as electives to be included in the thirty semester hours: Sociology 271, Sociology 311, Home Economics 391, and Psychology 431G.

Requirements for a Minor in Health Education: Twenty-one semester hours which must include Health 280, 330, and 340. Courses must be chosen from those listed under Health Education major.

Requirements for a Major in Community Health: For students choosing not to get a teaching certificate, thirty semester hours which must include 280, 340, and 421G. The remaining hours should be selected from the following suggested courses: 231, 475G, and 485. In addition, the following courses may be taken as electives in the thirty hours: Sociology 271, 311, Home Economics 391 and Psychology 431G.

Health 231. First Aid and Safety. **(S)** *Three hours*
Designed to aid the student in developing an understanding on the basic principles of accident prevention as applicable to the home, the highway, and the school. Special attention is directed to first aid and measures for various injuries and illnesses.

Health 280. Personal and Community Health. **(F,Sum)** *Three hours*
The relationship of bodily functions to personal health and grooming, and to community and national health.

Health 330. School Health Practices. **(S)** *Three hours*
A course dealing with the primary phases of school health — health instruction, health services, and healthful school environment — and how they can be coordinated into a functional health program.

Health 340. Physiology and Anatomy. **(F)** *Three hours*
Basic instruction in the functioning of the cells, organs, and systems of the human body.

Health 411. Health Education in the Secondary School. **(S)** *Three hours*
The experiences, activities, and instruction of secondary students that lead to intelligent self-direction of health behavior.

Health 421. Community Health. **(F)** *Three hours*
The social and cultural factors, the physical environment, and the health agencies and services as they relate to the health of the community.

Health 451. School and Community Health Workshop. **(Sum)** *Three hours*
Reveals the relationship needed between the school and community to promote the total health of the population. Speakers are secured from official agencies, voluntary agencies, professional agencies, sponsored agencies, and other colleges. Small groups are utilized for discussion, field trips, and study through audio-visual aids.

Health 475. Critical Areas in Health. **(S)** *Three hours*
Specific health problems confronting society today with particular reference to secondary age students.

Health 485. Field Experiences in Health. **(F,S,Sum)** *Three to Six hours*
A directed field experience in some phase of health, with consideration given to both the needs and interests of the student. Opportunities will be available for practical experiences in the school situation, official health agencies, and voluntary agencies.

Health 495. Independent Study. **(F,S,Sum)** *One to Three hours*
Independent study for advanced students only.

PHYSICAL EDUCATION

Requirements for a Major in Physical Eduction: Thirty semester hours which must include 351, 361, 421, Health 340, and four service courses. In addition the following courses may be taken as electives to be included in the thirty hours: Recreation 265, 321.

Service Courses

A maximum of eight semester hours of service courses may be credited toward graduation. Physical education majors must take four service courses. This is the maximum that can be applied to a major, but others may be taken as electives:

Physical Education 111. Beginning Swimming. **(F,S,Sum)** *One hour*
Physical Education 112. Intermediate Swimming. **(F,S,Sum)** *One hour*
Physical Education 113. Senior Life Saving. **(F)** *One hour*
Physical Education 121. Team Sports. **(F)** *One hour*
Physical Education 131. Archery and Badminton. **(F,S)** *One hour*
Physical Education 132. Beginning Golf. **(F,S,Sum)** *One hour*
Physical Education 133. Beginning Tennis. **(F,S,Sum)** *One hour*
Physical Education 135. Tumbling and Trampolining. **(S, Even Year)** *One hour*
Physical Education 141. Folk Dancing. **(S, Odd Year)** *One hour*
Physical Education 142. Social Dancing. **(F, Even Year)** *One hour*
Physical Education 145. Karate. **(F)** *One hour*

Physical Education 241. History of Physical Education. **(S)** *Three hours*
From primitive man through the present, with particular emphasis on Greek physical education, European systems, and development of physical education in America. Some research into the history of various sports.

Physical Education 251. Movement Experiences for Children. **(on demand)** *Three hours*
This course will introduce Physical Education teachers to the basic skills patterns which are common to all movement. It is designed to contribute to the teacher's understanding of movement and of the wide movement proposed for today's elementary school child.

Physical Education 252. Physical Education for Exceptional Children. **(on demand)** *Three hours*
This course is designed primarily for Elementary and Physical Education majors interested in working with atypical children. To get some practical experience the student will spend a portion of time working with atypical children in the classroom situation. Extensive treatment will be given to the manner in which Physical Education may be adapted to meet more adequately the needs of exceptional children.

Physical Education 253. Program Development for the Elementary Child. **(on demand)** *Three hours*
In this course students will develop varied programs based on needs, characteristics, abilities, and basic urges of children that relate to the basic purposes of Physical Education. Emphasis is placed on building programs on basic movement, rhythms, physical developmental activities, stunts and tumbling, games and relays.

Physical Education 261. Health and Physical Education in the Elementary School. **(F, Sum)** *Three hours*
The role of the classroom teacher in physical education on the playground, in the gymnasium, and the classroom. How to correlate and evaluate. The application of games, movements, exploration, rhythms, and self-testing activities, and screening tests.

Physical Education 271. Sports Officiating. **(F)** *Two hours*
Rules and officiating techniques in football, basketball, baseball, and track.

Physical Education 291. Principles of Dance. **(S)** *Two hours*
Elementary rhythms, folk, square, social and modern dance. (Even years only)

Physical Education 302. Coaching Basketball. (Even years only) **(F)** *Two hours*

Physical Education 303. Water Safety Instruction. **(S)** *Two hours*
Prerequisite: Senior Life Saving (113)

Physical Education 304. Coaching Baseball. (Odd years only) **(S)** *Two hours*

Physical Education 305. Coaching Track and Cross Country. (Odd years only) **(S)** *Two hours*

Physical Education 317. Organization and Administration of Intramurals. **(F)** *Three hours*
Planning, organizing, and directing a program of intramural activities for men and women. Attention is given to activities, awards, officials, finances, publicity, and other factors necessary to consider in administering an intramural program.

Physical Education 351. Testing and Measurements in Physical Education. **(S)** *Three hours*
Evaluating physical education by the construction and administering of tests. Emphasizes reliability, objectivity, and validity of tests, and the use of test results, motivation and school marks.

Physical Education 361. Organization and Administration of Health and Physical Education. **(S)** *Three hours*
Administration of health and physical education in shcool. Setting up the program, and evaluating results. Emphasizes budget and finance, office management, preparing the curriculum, facilities, legal factors, and public relations.

Physical Education 420. Adapted Physical Education. **(S)** *Three hours*
Health conditions which require the physical education program to be adapted to meet the special needs of individuals with handicapping conditions.

Physical Education 421. Anatomy and Kinesiology. **(F)** *Three hours*
An analysis of human motion and its relation to athletic and gymnastic activities; practical application of these principles.

Physical Education 435. Coaching and Officiating Team Sports. **(F)** *Three hours*
Theory and practice of techniques employed in field hockey, volleyball, softball, and soccer, with emphasis on methods of teaching. (Even years only.)

Physical Education 491. Seminar in Conducting Physical Activities. **(S)** *Three hours*
Seminar on the problems involved in the teaching of physical skills in the required program with an opportunity to gain practical experience.

Physical Education 495. Independent Study. **(F,S,Sum)** *Three hours*
Independent work for advanced students only.

RECREATION

Requirements for a Major in Recreation: Thirty semester hours including 241, 321, and 472. Remaining hours should be selected from the following: 265, 345, and 485. In addition, courses may be selected from the following to be included in the thirty semester hours: P.E. 111, 113, 121, 131, 132, 133, 135, 141, 142, 271, 291, 303, 317; Health 231; Art 241; Drama 331; Music 161. Recreation majors must also take four service courses.

Requirements for a Minor in Recreation: Twenty-one semester hours which must include 241, 321, and 472. Other courses must be chosen from those listed under Recreation.

Requirements for the Associate of Arts Degree in Recreation:

Freshman Year

Course	Hours
Freshman Composition	6
Introduction to Sociology	3
Foundations of Music	4
Safety and First Aid	3
Recreational Arts and Crafts	3
Foundations for Recreation	3
Physical Education Electives	2
Electives chosen from the general college course requirements	8
	32

Sophomore Year

Course	Hours
Principles of Dance	2
Recreational Sports and Activities	3
Sports Officiating	2
Personal and Community Health	3
Field Experiences	6
Organizations and Administration of Intramurals	3
Recreational Leadership	3
Physical Education Electives	2
Electives chosen from the general college course requirements	8
	32

Recreation 141. Foundations for Recreation. **(F)** *Three hours*
This course is designed as an introduction to the recreation profession. The nature of recreation, the influence of leisure, the recreation philosophy, and employment possibilities are explored.

Recreation 265. Recreational Sports and Activities. **(S)** *Three hours*
Presents students with information on various types of sports and activities, with emphasis on history, rules, equipment, skills, and techniques.

Recreation 285. Field Experiences in Recreation. **(F,S,Sum)** *Three to twelve hours*
Experience in recreation planning, leadership, supervision, and programs through work in private, public, and voluntary community recreation.

Recreation 321. Recreational Leadership. **(S)** *Three hours*
Leadership techniques in music, social games, arts and crafts, dramatics, camping, nature, and sports. Designed to aid students in enriching their own leisure time and to prepare for leadership in teaching, full-time Christian service, and social service.

Recreation 345. Outdoor Recreation. **(F)** *Three hours*
Develop a knowledge and understanding of outdoor activities as they relate to a variety of settings.

Recreation 472. Planning Recreation Programs. **(S)** *Three hours*
Comprehensive course in recreation program planning, development, and leadership techniques with individuals and groups. Students plan a one-year program.

Recreation 485. Field Experiences in Recreation. **(F,S,Sum)** *Three to twelve hours*
Same course description as 285

Recreation 495. Independent Study. **(F,S,Sum)** *Three hours*

"Studies in the humanities are vital in dealing with present-day problems. Knowledge of the humanities sharpens moral consciousness, fosters logical modes of thought, and leads to increased recognition of fundamental truths."

Allan E. Green

Division of Humanities

Allan E. Green, Chairman

Department of Fine Arts — Department of Languages

Department of Religion and Philosophy

1. DEPARTMENT OF FINE ARTS

Leo E. Dontchos, *Department Head*

Art—Drama and Speech—School of Music

ART

Requirements for a Major in Art: Thirty semester hours, with a curriculum which contains a core of twenty-four hours, including Art Fundamentals (201-202), Drawing (211, 212), Painting (341-342), and Art History (373-374). The remaining six hours may be tailored, in consultation with the faculty, to suit the student's interests and needs. This should be accomplished by the end of the sophomore year. As soon as such a program is agreed upon, it becomes an individualized curriculum for the student. Changes may be made only the approval of the student, the student's faculty advisor, and the Head of the Department of Fine Arts. Exhibitions are required of all art majors. Details are available from the Department of Fine Arts.

Requirements for a Minor in Art: Twenty-one semester hours, to include Art 201, 202, 211, 212, one semester of painting and Art History.

The Department reserves the right to retain a maximum of two works of art from each student enrolled in a studio course.

***Art 132. Introduction to Art.** **(S) Three hours**

An introduction to Art outlining basic approaches, principles, techniques and media as well as styles of expression, both past and present.

Art 201-202. Art Fundamentals. **(F,S)** *Three hours each*
A study of the visual elements of form and the principles of organization through their application to two and three dimensional design problems. Art 201 is a prerequisite to Art 202.

Art 211-212. Drawing. **(F,S)** *Three hours each*
A studio course which acquaints the student with a variety of drawing media. The approach is representational to enable the student to acquire technical skills in rendering.

Art 241. Recreational Arts and Crafts. **(F)** *Three hours*
The development of skills in arts and crafts with particular attention to recreational applications.

Art 271. Elementary School Art. **(F)** *Three hours*
A studio course involving many kinds of art projects in many media, suitable and practicable for elementary grades.

Art 341-342. Painting **(F,S)** *Three hours each*
A studio course in which the student incorporates the elements of design in representational painting. Major emphasis is on the oil media. *Prerequisite:* Art 212

***Art 373. Art History: Ancient through Renaissance.** **(F)** *Three hours*
A survey of the development of western art from prehistoric times through the period of the High Renaissance.

***Art 374. Art History; Modern.** **(S)** *Three hours*
A survey of the development of western art from the end of the High Renaissance to the present.

Art 441. Advanced Studio. **(F,S)** *Three hours*
Studio work in the various painting, drawing, and three-dimensional media. Emphasis on the creative approach. Prerequisites: Art 201, 202, 341, 342. May be repeated once for credit.

Art 495. Independent Study in Art. **(F,S)** *Three hours*
Independent study or research on an approved topic, or guided independent studio work beyond the 441 level. May be repeated for credit.

DRAMA AND SPEECH

Requirements for a Major in Drama and Speech: Thirty-six semester hours, including Drama 251, 352, 331, 332, 365, 366, 451, Speech 131 and 231, two courses in dramatic literature selected from approved offerings in either the Drama or English areas, and three hours of practical experience (Drama 151).

Requirements for a Minor in Drama and Speech: Twenty-one semester hours, including Drama 251, 331 or 332, 365, 366.

***Drama 131. Introduction to the Theatre.** **(F)** *Three hours*
Basic principles underlying the origin and development of theatrical presentation. Brief study of elements of production.

***Drama 151. Theatre Practicum.** **(F,S)** *One hour*
Actual practical experience in major college theatrical productions in the areas of acting, directing, and production work. May be repeated three times for credit.

Drama 251. Fundamentals of Acting. **(S)** *Three hours*
Theory and practice behind analysis and presentation of a role. (Even years only.)

***Drama 321. European Drama since 1945.** **(F)** *Three hours*
A study of representative plays in translation by modern writers from Germany, France Italy, and Poland. (Odd years only.)

Drama 331. Play Production. **(F)** *Three hours*
Study and practice in theatrical design and stage lighting. *Prerequisite:* Drama 131 or permission of instructor. (Odd years only.)

Drama 332. Play Production. **(S)** *Three hours*
Study and practice in theatrical costuming and make-up. *Prerequisite:* Drama 131 or permission of instructor. (Odd years only.)

Drama 352. Advanced Acting. (S) *Three hours*
Scene study and period styles of acting. Prerequisite: Drama 251 or permission of instructor. (Odd years only.)

***Drama 365. History of the Theatre.** (F) *Three hours*
Study of theatrical presentation from the Golden Age of Greece to Ibsen. *Prerequisite:* Junior or senior standing or permission. (Even years only.)

***Drama 366. History of Modern Theatre.** (S) *Three hours*
Study of theatrical presentation from Ibsen to present. *Prerequisite:* Junior or senior standing or permission. (Even years only.)

Drama 451. Directing. (S) *Three hours*
Study and analysis of scripts for production and of production techniques. Staging of one-act play required. Prerequisite: Permission of instructor.

Drama 495. Independent Study in Drama. (F,S) *Three hours*
Independent study or research on an approved topic. May be repeated for credit.

***Speech 131. Fundamentals of Speech.** (S) *Three hours*
Study and practice in the basic elements of speech applicable in daily life, such as voice, articulation, pronunciation, bodily activity, speech organization, outlining and research.

***Speech 231. Interpretative Reading.** (F) *Three hours*
Analysis and oral interpretation of the various forms of literature. Special emphasis on developing qualities for interpretation of character, emotion, and artistic impersonation.

SCHOOL OF MUSIC

The School of Music functions within the total academic structure of Union College and participates in the granting of the following degrees: Bachelor of Music (Applied Music or Music Education Major), Bachelor of Arts (major in music), and Bachelor of Science (major in music).

The purposes of the School of Music are: To offer intensive professional training to the music major and to provide the general college student with the opportunity to become acquainted with music as one aspect of a liberal culture, either as appreciative listeners or as trained participants; to prepare students for graduate study, as church organists and choirmasters, as private teachers of music, and as teachers of music for the public schools.

Admission. The requirements for admission to the School of Music are the same as for admission to the College.

Regulations. All academic regulations and other requirements and specifications of the Union College catalog will apply unless specific mention is made in the School of Music section of the catalog.

No Special Music Fees. No special fees exist for private lessons in music. Students majoring in other fields of study may avail themselves of class lessons in piano, voice, wind, and stringed instruments. Upon sufficient advancement, these students also may receive private instruction without any special fee being charged.

Advanced Placement and Curriculum Acceleration. The School of Music recognizes that its students come with widely varying backgrounds and abilities. In the case of the student with a superior pre-college background in music, advanced placement by examination is possible. In addition, it is also possible for the outstanding student to accelerate his progress through the curriculum by opting for independent study. This process, however, places the responsibility for meeting curricular requirements squarely on the student. In the case of curriculum acceleration, a minimum of three years is required, principally to assure sufficient grounding in the applied music area. Permission of the Director of the School of Music and the student's major professor is required.

Preparatory Department. Preparatory work in piano, wind, voice, and stringed instruments is offered in the form of class or private lessons for pre-college students. There is a fee charged for these lessons. A similar arrangement is available for special students of college age and above who are not enrolled as full-time students in the regular curriculum.

Teacher Certifications. The degree program in Music Education, leading to the Bachelor of Music, fulfills the Kentucky requirements for teacher certification. Kentucky teacher certification is reciprocal with many other states.

Piano Proficiency. All music majors must pass a proficiency examination in piano prior to graduation.

Ensemble Requirement. All majors are required to participate a minimum of seven semesters in one ensemble and a minimum of four semesters in another ensemble area.

Program Attendance. All applied students are required to attend all Monday afternoon recitals.

Majors. All majors are required to attend three-fourths† of the total number of programs. A year's work in the applied field is not complete until the recital requirements are fulfilled.

Minors. All minors are required to attend one-half† of the total number of programs.

Others registered for applied music. Others registered for applied music must attend one-third of the total number of programs.

Music 321, 322, and Music 121-3. Recital attendance for students in Music 321 and 322, as well as Music 121, 122, and 123 is at the discretion of the teaching staff.

Student Recitals. Student recitals will be held the third Monday of each month at 4:00 p.m. With the exception of first semester students, all applied students must perform a minimum of one time each semester.

Each student majoring in music presents a junior recital of at least thirty minutes performing time and a senior recital of at least forty-five minutes performing time.

Recital Examinations. Junior and Senior recital examination shall be given no later than two weeks prior to the recital.

Music Library. The music library, located in the Fine Arts Building, contains records, scores, and listening facilities.

Minor in Music. Twenty-one semester hours, including: Music 161, 162; three semester hours selected from either Music 321 or 322; two semester hours of music electives; two years of ensemble; and completion of the 202 level of course numbering in one field of applied Music.

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†The total number of programs is made up of all School of Music programs, Artist Series programs, and Southeastern Kentucky Concert Series programs on campus. Recital attendance credit may also be obtained by attending Southeastern Kentucky Concert Series programs held off campus. Check the Music bulletin board for the total number of programs for the current semester.

Music Major, B.A. and B.S.

Please see general requirements.

Academic Emphasis	Sem. Hrs.
Foundations of Music	8
Harmony	6
Form and Analysis	4
Music History	12
Applied Music	8
Ensemble	0
Music Elective	2
	40

Applied Emphasis	Sem. Hrs.
Foundations of Music	8
Harmony	6
Form and Analysis	4
Music History	6
Applied Music	16
Ensemble	0
	40

Bachelor of Science

Combination Music and Business Major

Special curricula combining the study of music with preparation in business may be designed to fit the needs of the individual student.

Bachelor of Music Degree (Applied Music)

Music Requirements.

Academic	Sem. Hrs.
Foundations of Music	8
Harmony and Ear Training	8
Form & Analysis	4
Counterpoint	4
Music History	6
Applied Field Literature	4
	34

Applied	Sem. Hrs.
Major Applied Study	24
Recitals	2
Piano Secondary†	4
Stringed Instruments Class†	2
Wind Instruments Class†	2
Voice Class†	1
Pedagogy	1
Ensemble	0
	36

General Requirements.

	Sem. Hrs.
Humanities	12
English 111-112	6
Foreign Language	12
Science	4
Social Science	9
Electives	15
	58

Bachelor of Music Degree (Music Education)

Music Requirements.

Academic	Sem. Hrs.	Applied	Sem. Hrs.
Foundations of Music	8	Major Applied Study	16
Harmony and Ear Training	8	Recital	0
Form & Analysis	4	Piano Secondary†	4
Music History	6	Stringed Instruments Class †	2
Conducting	4	Wind Instruments Class†	2
Secondary School Music	3	Voice Class†	1
Music Arranging	2	Ensemble	0
	35		25

General Requirements. This includes both the regular college requirements and the education Certification Requirements for the music education major. Music majors seeking the BM degree may use 9 hours of music to help fulfill humanities requirements.

APPLIED MUSIC

The study of music through the development of performance skills is the central core in the training and growth of the musician. Instruction is offered in the following instruments: piano, organ, voice, woodwinds, brass, strings, and percussion. The following goals are common to all applied music study:

developing in the student a high level of technical proficiency;
acquainting him with the learning processes involved in that development;
familiarizing him with a body of musical literature appropriate to his instrument;
assisting him in mastering a representative sample of that repertory.

Complete outlines of the levels of technical proficiency and repertory expected at the end of each semester of study are given to the student at the beginning of the semester. These are organized in an eight semester sequence designed to insure that the student completing the sequence has achieved a level of mastery appropriate to a baccalaureate music degree. Similar outlines exist for students enrolling for applied music study at the minor or elective level. The content of these applied music course outlines is for the guidance of the student and the teacher, and is therefore a flexible rather than a rigid description of the requirements. Copies of these outlines may be requested from the Head of the Department of Fine Arts.

SECONDARY LEVEL

These courses are designed for general college students enrolling for applied music study as an elective, and for use as a secondary applied field for music majors and minors.

***Music 101-102. Applied Music.** **(F,S)** *One or two hours*
Freshman level secondary applied music study.

***Music 201-202. Applied Music.** **(F,S)** *One or two hours*
Sophomore level secondary applied music study.

***Music 301-302. Applied Music.** **(F,S)** *One or two hours*
Junior level secondary applied music study.

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†Certain of these may be waived or passed by examination if the skill involved coincides with the student's Major Applied study area. In this case the equivalent number of ensemble hours may be applied toward the total needed for graduation.

*Applied Music may be taken for Humanities credit under special arrangement. Consult with the Head of the Fine Arts Department for details.

***Music 401-402. Applied Music.** **(F-S)** *One or two hours*
Senior level secondary applied music study.

MAJOR LEVEL

These courses are designed for music majors enrolled in the Bachelor of Music Curriculum and for students seeking a Bachelor of Arts or a Bachelor of Science degree with a music major or minor.

***Music 111-112. Applied Music.** **(F,S)** *Two or three hours*
Freshman major or minor level applied music study.

***Music 211-212. Applied Music.** **(F,S)** *Two or three hours*
Sophomore major or minor level applied music study.

***Music 311-312. Applied Music.** **(F,S)** *Two or three hours*
Junior major level applied music study.

Music 317. Junior Recital. **(F,S)** *Zero or one hour*

***Music 411-412. Applied Music.** **(F,S)** *Two or three hours*
Senior major level applied music study.

Music 415-416. Applied Field Literature. **(on demand)** *Two hours*
A study of the literature available for the student's major instrument, and related instruments where appropriate, with attention to stylistic characteristics and ornamentation.

Music 417. Senior Recital. **(F,S)** *Zero or one hour*

Music 418-419. Sight Reading and Accompanying. **(on demand)** *One hour*
Proficiency in reading the various clefs, vocal scores, and accompaniments, with emphasis on the techniques of sensitive accompanying. Keyboard majors and selected minors only.

HISTORY AND APPRECIATION

***Music 121. Introduction to Music.** **(†)** *Three hours*
A study of musical materials and styles for the student with a limited musical knowledge. Not open to music majors or music minors.

***Music 122. Introduction to the History of American Popular Music.** **(†)** *Three hours*
A historical approach involving the study of styles and personalities beginning with the origins of jazz and ending with the current trends and concepts of today. Open to all students.

***Music 123. Introduction to the History of Church Music.** **(†)** *Three hours*
The history and function of Western Church music from ancient Judaism through contemporary usage. Open to all students.

***Music 321-322. Music History.** **(F,S)** *Three hours*
A study of representative music both written and recorded, and readings, coordinating and integrating music skills. Prerequisite: Music 162 or permission of the instructor.
(321) Antiquity through 1750.
(322) Classic period to the present.

Music 421-422. Music History Seminar. **(on demand)** *Three hours*
Intensive study of a selected period of genre. Major paper required. *Prerequisite:* Music 321-322.

ENSEMBLES

Music 151. Chorus. **(F,S)** *Zero or one hour*
Open to all college students; performs major choral works in concerts. One rehearsal per week. May be repeated for credit.

Music 152. Choir. **(F,S)** *Zero or one hour*
Open by audition only; performs in chapel, Christmas concert, yearly tour, spring concert, graduation. Limited to forty-nine students; four rehearsals per week. May be repeated for credit.

(†) One of these courses will be offered each semester and every summer.

Music 153. Stage Band. **(F,S)** *Zero or one hour*
Open by audition only. A jazz oriented ensemble of appropriate instrumentation limited to twenty students. Two rehearsals per week. May be repeated for credit.

Music 154. Wind Ensemble. **(F,S)** *Zero or one hour*
Open to all those interested in band music. Two rehearsals per week. May be repeated for credit.

Music 155. Brass Chamber Ensemble. **(F,S)** *Zero or one hour*
Open by audition only. Size and make-up will vary with the needs and interests of the students enrolled. One rehearsal per week. May be repeated for credit.

Music 156. Collegium Musicum. **(on demand)** *Zero or one hour*
Open to interested students. A performance group intended to give the student acquaintance with less frequently performed literature. One rehearsal per week. May be repeated for credit.

Music 157. Woodwind Chamber Ensemble. **(F,S)** *Zero or one hour*
Open by audition only. Size and make-up will vary with the needs and interests of the students enrolled. One rehearsal per week. May be repeated for credit.

Music 158. String Chamber Ensemble. **(on demand)** *Zero or one hour*
Open by audition only. Size and make-up will vary with the needs and interests of the students enrolled. One rehearsal per week. May be repeated for credit.

Music 159. Percussion Ensemble. **(on demand)** *Zero or one hour*
Open by audition only. Size and make-up will vary with the needs and interests of the students enrolled. One rehearsal per week. May be repeated for credit.

Music 357. Opera Workshop. **(on demand)** *Zero or one hour*
Experience in the standard and contemporary opera repertoire; preparation and presentation of complete operas and programs of excerpts, with costumes and scenery. Admission by audition only. May be repeated for credit.

THEORY

***Music 161-162. Foundations of Music.** **(F,S)** *Four hours*
A combined course in the areas of music theory, history, and literature. Five periods per week.

***Music 261-262. Harmony.** **(F,S)** *Three hours*
Continuation of Music 161-162 in the area of part-writing and analysis. Advanced chromatic harmony of the middle Romantic period. Three periods per week. **Prerequisite:** Music 162.

Music 263-264. Ear Training. **(F,S)** *One hour*
Sight singing, ear training, and dictation to be taken concurrently with Music 261-262. Two periods per week. **Prerequisite:** Music 162.

***Music 361-362. Form and Analysis.** **(F,S)** *Two hours*
The development of musical forms from small units to large. Study of large scale analytic techniques including those necessary for late 19th and early 20th Century Music. **Prerequisite:** Music 262.

Music 365. Music Arranging. **(F)** *Two hours*
Basic techniques of orchestration and arranging. **Prerequisite:** Music 262.

Music 461-461. Counterpoint. **(on demand)** *Two hours*
The vocal counterpoint of Palestrina and the instrumental counterpoint of Bach. **Prerequisite:**Music 162.

Music 465. Theory Seminar. **(on demand)** *Three hours*
An advanced course in music theory, including a study of contemporary practices. **Prerequisite:** Music 362, and permission of the instructor.

MUSIC EDUCATION

Music 171-172. String Instruments Class. **(F,S)** *One hour*
Class instruction in string instruments.

Music 173-174. Piano Class. **(F,S)** *One hour*
Class instruction in piano.

Music 175-176. Wind and Percussion Instruments Class. **(F,S)** *One hour*
Class instruction in woodwind, brass, and percussion instruments.

Music 177-178. Voice Class. **(F,S)** *One hour*
Class study for students who are not prepared to study at the level of private applied voice.

Music 373. Elementary School Music. **(S)** *Three hours*
Methods and materials in the elementary school. Will include functional ability at the piano keyboard, the fundamentals of music, and library research.

Music 374. Secondary School Music. **(F)** *Three hours*
Methods and materials for junior and senior high school. Will include research projects. **Prerequisite:** Junior standing in the School of Music or permission of the instructor.

Music 473-474. Conducting. **(F,S)** *Two hours*
Basic techniques of the art of conducting; score reading, both vocal and instrumental; rehearsal techniques; balance and interpretation; organization; survey and study of literature; practical work with ensembles.

Music 475. Pedagogy. **(on demand)** *One hour*
Techniques and principles of private and class instruction with examination of carefully considered and recommended materials.

INDEPENDENT STUDY

Music 495. Independent Study. **(F,S)** *Two or three hours*
Independent study and/or research on an approved topic. **Prerequisite:** Permission of the student's major professor. May be repeated for credit.

2. DEPARTMENT OF LANGUAGES

W. Gordon Marigold, *Department Head*
English—French—German

ENGLISH

Requirements for a Minor: A minimum of twenty-four semester hours including 111, 112. This must include six hours of English literature survey; American literature survey 341; three hours of Shakespeare: 371 or 372; and one genre course from 351, 352, and 451G.

Requirements for a Major: A minimum of thirty semester hours in addition to English 110, 111, 112, including the requirements noted for Minors; 401G or 421G; one further advanced course, preferably a seminar course at the 400 level, determined by consultation. English majors are also advised to take at least six hours of a foreign language.

Requirements for an Area: Forty-eight hours, thirty of which shall satisfy the requirements for a major, and including an advanced writing course; one additional period course selected from 321, 322, 331 and 332; and courses in speech or drama.

Students preparing to teach high school English are required to take Education 362 and should elect the English major. English minors who expect Department recommendation for teacher training should consult the department Head about their individual needs for advanced courses.

A general prerequisite for 200 level courses is the successful completion of English 111, 112. Students are urged to take English 221, 222 before entering more advanced courses. Students who have not taken English 221, 222 are urged to consult with members of the Department before enrolling for advanced work.

English 110. Elementary Freshman Composition. **(F,S)** *Three hours*
A course in basic writing skills of progressing complexity beginning with the sentence and ending with the theme. Must be followed by English 111.

English 111. Freshman Composition. **(F,S,Sum)** *Three hours*
Writing of descriptive, expository, and argumentative themes and documented papers. Study of the essay as a model and for discussion. Must precede English 112.

English 112. Freshman Composition. **(F,S,Sum)** *Three hours*
Literary models and a brief introduction to literary forms provide the basis for longer themes emphasizing critical writing and documentation.

***English 221-222. Survey of English Literature.** **(F,S)** *Three hours each*
From *Beowulf* into the 20th century. The first half includes the Middle Ages and Renaissance and the second starts with the Neo-classical and continues through the Romantic and Victorian periods. Either course may be taken separately and not necessarily in sequence.

***English 321. Sixteenth and Seventeenth Century Literature.** **(F)** *Three hours*
A study of non-dramatic poetry and prose beginning in the early Renaissance (with emphasis on such figures as Sidney and Spenser), continuing through the metaphysical poets and the Cavalier poets, and culminating in Milton. (Odd years only.)

***English 322. Restoration and Eighteenth Century Literature.** **(S)** *Three hours*
Prose and poetry of the neo-classical age, beginning with Dryden and his contemporaries and extending through Samuel Johnson. (Odd years only.)

***English 331. English Romantic Period.** **(F)** *Three hours*
The prose and poetry of the first third of the 19th century, emphasizing the work of Wordsworth, Coleridge, Byron, Shelley, and Keats. (Odd years only.)

***English 332. Victorian Period.** **(S)** *Three hours*
Major poets and prose writers, emphasizing the contributions of such masters as Tennyson, Browning, and Arnold. (Odd years only.)

***English 341-342. Survey of American Literature.** **(S,)** *Three hours each*
The first half extends from the colonial writers through Whitman and the second from Dickinson to the mid-20th century. Either course may be taken separately and not necessarily in sequence. (Even years only.)

***English 351. The English Novel.** **(F)** *Three hours*
The historical study of the growth of the novel as a form, with selected examples from Defoe through Hardy. (Even years only.)

***English 352. The American Novel.** **(S)** *Three hours*
From the "American Renaissance" of the 19th century through the rise of realism to Faulkner and more recent developments. (Even years only.)

English 355. Survey of Children's Literature. **(F)** *Three hours*
Designed to familiarize the student with books and other library materials suitable for supplementing the curriculum and encouraging recreational reading in the elementary school. (Cannot be used toward humanities general requirement, major, minor, or area in English.)

***English 371-372. Shakespeare.** **(F,S)** *Three hours each*
An intensive and critical study of selected plays, focusing on their timeless human, literary, and dramatic qualities. Each course may be taken separately and not necessarily in sequence.

A general prerequisite for 400 level courses is Junior standing.

English 401. Modern Grammar. **(S,Sum)** *Three hours*
A survey of modern approaches to the study of language beginning with the structuralist view of linguistic analysis through the theories of generative grammar to the most recent developments in generative semantics. Considerable attention will be paid to the possibilities of practical applications of linguistic theory. (Even years only.)

English 402. Advanced Composition. **(on demand)** *Three hours*
For the student who wishes to become a more competent writer. Research papers, factual narratives, argumentation, and "creative" writing are assigned according to the needs and aptitude of the student.

English 419. Composition for Teachers of English. **(S)** *Three hours*
Designed to train teachers of secondary school English composition and to indirectly improve the writing of their students. The instructor will utilize the contributions of his colleagues. Required for certification to teach secondary English. (Odd years only.)

***English 421 History of the English Language.** **(F, Sum)** *Three hours*
A study of the origins and development of the English language from Anglo-Saxon times to the present. Supplementary readings in early and medieval English history with emphasis on the effects of historical events on language change. Odd years only.

***English 451. Modern Poetry.** **(F)** *Three hours*
American and British poetry, with consideration of ways of reading, critizing, and writing verse in this century. Odd years only.

***English 495. Independent Study.†** *Three hours*
Intensive individual work, under supervision, in some phase of English, American, or world literature, linguistics, or composition not otherwise covered in the curriculum. *Prerequisites:* Twenty-four hours of English above English 111, 112, and permission of the head of the department. May be repeated for credit.

FRENCH

The program offers the opportunity to gain some understanding of France and its culture as well as a basic knowledge of the French language. Students offering more than one entrance unit in French and students transferring from other colleges should consult with the Head of the Department of Languages before registering for any course in French.

***French 111-112. Elementary French.** *Three hours each*
Basic French grammar; practice in the oral and written language. (Odd years only.)

***French 211-212. Intermediate French.** **(F,S)** *Three hours each*
More detailed study of grammatical structure; study of important literary works; individual collateral reading. Prerequisite: French 111-112 or equivalent. (Even years only.)

***French 331. French Civilization.** **(S)** *Three hours*
The economic, social, and cultural development of France; French contributions to world civilization. May not count toward fulfillment of the language requirement. No knowledge of French required. (Even years only.)

***French 495. Independent Study.†** **(F,S)** *Three hours*

GERMAN

The program offers the opportunity to gain some understanding of Germany and its culture as well as a basic knowledge of the German language. Students offering more than one entrance unit in German and students transferring from other colleges should consult with the Head of the Department of Languages before registering for any course in German.

***German 111-112. Elementary German.** **(F,S)** *Three hours each*
Basic German grammar; simple reading; practice in the oral and written language.

***German 211-212. Intermediate German.** **(F,S)** *Three hours each*
More detailed study of grammatical structure; reading of important literary works; individual collateral reading. *Prerequisite:* German 111-112 or equivalent.

***German 331. German Civilization.** **(S)** *Three hours*
The economic, social, and cultural development of Germany; German contributions to world civilization. May not count as part of the language requirement. No knowledge of German required. (Odd years only.)

***German 495. Independent Study.†** **(F,S)** *Three hours*

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†May be counted toward the Humanities Requirement if topic approved by Head of the Department of Languages, and filed with the Registrar.

3. DEPARTMENT OF RELIGION AND PHILOSOPHY

Robert D. Matthews, *Department Head*

Courses in this Department are designed to acquaint the student with the Judaeo-Christian tradition and the other great religious traditions of mankind and with the great traditions and disciplines of human thought; to deepen his awareness of himself and of the human community; to cultivate his powers of critical examination and the meaning and direction of human existence.

Studies in religion are especially recommended for students of art, history, and literature, and for students preparing for Christian vocations.

Studies in philosophy are especially recommended for pre-professional training for such vocations as the Christian ministry, college teaching, law, journalism, creative writing, and art, as well as for students of history, literature, and the sciences.

Pre-ministerial Preparation. The American Association of Theological Schools has stated that the college work of students planning to enter the ministry should result in at least the following: 1. Ability to speak and write English clearly and correctly, to think clearly, and to read at least one foreign language; 2. Acquaintance with the world of men and ideas, the world of nature, and the world of human affairs; and 3. A sense of achievement through the mastery of fields of study and through honors work or other independent study. The student is expected to become well grounded in English, philosophy, and history, and to gain some background in social studies (especially psychology and sociology), the natural sciences, languages, and religion.

CHRISTIAN EDUCATION

In recognition of increasing demand for trained young men and women as full-time Christian workers in the unordained ministry of the local church, to serve in the capacities of pastor's assistant, director of youth work, or Director of Christian Education, a specific four-year course of study has been arranged, using the facilities of various departments. It is designed to meet the basic needs of students who wish to go directly into church positions without graduate work.

The 24 hour major is recommended in Religion including Rel. 222, plus courses in music, drama and Appalachian studies. A second major or minor in drama or music is often helpful. The following three courses should supplement the major:

Speech 131, Fundamentals of Speech
Recreation 321, Recreational Leadership
Psychology 402, Counseling Theories and Techniques

RELIGION

Requirements for a Major. The twenty-four hour major, recommended for Christian Education and pre-ministerial students, must include courses 111, 112 and 490, plus Philosophy 261. The thirty hour major may include Philosophy 371.

Requirements for a Minor. Twenty-one semester hours, at least nine of which must be in courses numbered above 300.

Religion 101. Conference Studies. **(on demand)** *No credit*
A study of the books required by the Methodist Church for the local preacher's license. Required of all recipients of ministerial loan-grants who have not yet obtained the license to preach.

***Religion 111. Old Testament History, Literature, and Interpretation.** **(F)** *Three hours*
The history of Israel from the earliest times to the Maccabean Age. Historical and literary criticism and religious significance of the emergence of Judaism. (Odd years only.)

***Religion 112. New Testament History, Literature, and Interpretation.** **(S)** *Three hours*
Attention to author, date, origin, historical and religious significance. Religion 111 recommended. (Odd years only)

***Religion 121. Primitive Religions.** **(F)** *Three hours*
Survey of the origins and characteristics of rites, legends, and myths of technologically undeveloped societies. (Odd years only.)

***Religion 127. Archaeology and the Bible.** **(S)** *Three hours*
Exciting archaeological discoveries, especially those related to the Bible, supplemented by wide reading in books, magazines, and newspapers, and class reports, color slides, and movies.

***Religion 201-202. Readings in the Greek New Testament.** **(F,S)** *Six hours*
An inductive approach to koine Greek, recommended especially for the pre-seminary students. (Even years only.)

***Religion 212. The Old Testament Prophets.** **(F)** *Three hours*
The nature of prophecy and the prophetic movement in Israel from its beginning with Moses to its close with the book of Jonah. Religion 111 recommended. (Even years only.)

Religion 222. Administration and Education in the Local Church. **(S)** *Three hours*
Administrative responsibilities of the Director of Christian Education as related to the pastor, local church governing body, and the congregation. Theory and practice of Christian Education with special attention to planning a year's program in the local church.

***Religion 231. The Life and Teachings of Jesus.** **(S)** *Three hours*
The world in which Jesus was born and an interpretation of his messianic consciousness, personality, activities, and teachings. Religion 112 recommended. (Even years only.)

***Religion 241. The Life and Teachings of Paul.** **(F)** *Three hours*
The world of Paul, his life, teachings, and significance, using his letters as the primary source. Religion 112 recommended. (Even years only.)

***Religion 311. Introduction to Christian Thought.** **(S)** *Three hours*
Examination of traditional and contemporary understanding of the Christian faith, with emphasis on the nature of God and of man; the significance of Christ and the Church; the relation of religion to morality; the meaning of Creation and Redemption; and the interpretation of Human Destiny. *Prerequisite:* 112. (Even years only.)

***Religion 321. Primitive Religions.** **(F)** *Three hours*
Same course as Religion 121, but with more independent research. For upperclassmen. (Odd years only.)

***Religion 327. Archaeology and the Bible.** **(S)** *Three hours*
Same as Religion 127 but with additional reading and reports.

***Religion 353. Church History.** **(on demand)** *Three hours*
The origin and development of the Christian Church from its beginnings through the Reformation.

***Religion 355. World Religions.** **(S)** *Three hours*
A descriptive account of the faith and practices of present-day world religions, with emphasis on Hinduism, Buddhism, Confucianism, Islam.

***Religion 490. Seminar in Religion.** **(on demand)** *Three hours*
Intensive study on a special subject, with oral and written reports. Possible topics include The Fourth Gospel, Apocalyptic Literature, Pauline Theology, Wisdom Literature, The Apostolic Period. *Prerequisite:* Advanced standing and permission of the instructor.

Religion 495. Independent Study. **(F,S)** *Three hours*
Independent study or research on an approved topic. May be repeated for credit.

PHILOSOPHY

Requirements for a Major: Either a twenty-four or a thirty hour major may be elected. Religion courses 311 and 355 may be included.

Requirements for a Minor: Twenty-one semester hours.

***Philosophy 151. Introduction to Philosophy.** **(F,S)** *Three hours*
Both a study of the nature of philosophy, its aims, problems, and methods, and an exercise in philosophizing in which the student clarifies constructively and evaluates critically his own and other understandings of life.

***Philosophy 202. Logic.** **(S)** *Three hours*
Cultivation of rational acuity through an examination of the procedures and limits of rational discourse. (Odd years only.)

***Philosophy 261. Philosophy of Religion.** **(F)** *Three hours*
An introduction to basic modern concepts, issues, and methods in the philosophical examination of religion. (Odd years only.)

***Philosophy 371. Ethics.** **(F)** *Three hours*
Cultivation of moral awareness through an examination of human activity, individual and social, with particular reference to the grounds of ethical decision and evaluation. The major theories are examined and related to concrete personal and social problems. (Even years only.)

***Philosophy 376. History of Western Philosophy I: Ancient and Medieval.** **(S)** *Three hours*
Philosophical thinking in its cultural context, from its birth through the classical and medieval eras. (Odd years only).

***Philosophy 377. History of Western Philosophy II: Modern.** **(F)** *Three hours*
The rise and development of modern culture and its thought-forms, through the nineteenth century. (Even years only.)

***Philosophy 378. History of Western Philosophy III: Contemporary.** **(S)** *Three hours*
Twentieth century western thinking and its nineteenth century backgrounds, with particular reference to pragmatism, phenomenology, existentialism, the analytical movement and dialectical materialism. *Prerequisite:* Philosophy 151. (Even years only.)

***Philosophy 402. Aesthetics.** **(on demand)** *Three hours*
Exploration and cultivation of the sense of beauty through an examination of the nature of artistic production and of the grounds of aesthetic criticism and judgment, including a survey of aesthetic theory. (Alternate years.)

***Philosophy 490. Seminar in Philosophy.** **(on demand)** *Three hours*
Intensive study of a special topic such as Epistemology, Metaphysics, Plato, Kant. Permission of instructor required.

Philosophy 495. Independent Study. **(F,S)** *Three hours*
Independent study or research on an approved topic. May be repeated for credit.

I believe that students should be acquainted with the ways scientists think and work; the questions they ask, the methods they use to seek answers and how the significance of their work is determined. The teaching of science must not be the mere dissemination of "textbook facts" but must be enriched with perspectives as to how concepts develop.

Wendell B. Kringen

Division of Natural Sciences

Wendell Kringen, *Acting Chairman*
Biology — Chemistry — Environmental Studies
General Science — Mathematics — Physics
Radiologic Technology

PRE-PROFESSIONAL PROGRAMS

Since professional schools vary considerably in their admission requirements, the student is advised to select the professional school he wishes to attend later, and then choose pre-professional courses accordingly. The science faculty should be consulted before registration in order to assist the student in preparing a course schedule. For details of a specific program, the following faculty members should be consulted.

Dentistry—Dr. Johnson, Chemistry
Engineering—Dr. Santaram, Physics
Environmental Studies—Mr. Barton, Regional Studies
Medical Technology—Dr. Kringen, Biology
Medicine—Dr. Simpson, Mathematics
Optometry—Mr. Scott, Biology
Pharmacy—Ms. Thomas, Mathematics
Physical Therapy—Mr. Scott, Biology
Veterinary Medicine—Mr. Carter, Physical Science

COMBINED DEGREE IN ENGINEERING

A cooperative "Three-Two Plan" has been worked out with the University of Kentucky in which the student attends Union College for three years pursuing certain pre-engineering courses in addition to a solid program in liberal arts. At the end of the three years upon the recommendation of Union College, he enters the cooperating university or any accredited engineering school as a junior and in two additional years completes all the requirements for the B.S. degree in Engineering. Both the B.A. or B.S. from Union College and B.S. In Engineering from the cooperating university are awarded at the end of the fifth year.

ENVIRONMENTAL STUDIES PROGRAM

Since 1970 Union College has conducted a variety of environmental programs for students and community leaders. The focal point has been the College's Environmental Education Center in the Cumberland Gap National Historical Park. This special 100 acre campus, located near the town of Middlesboro and about 35 miles south of Barbourville, includes classrooms, dormitories, dining hall, gymnasium, conference rooms, library, laboratory, exhibits, weather station, and trails. The 20,000 acres of the surrounding national park provide excellent opportunity for environmental field study. The Center offers workshops, conferences, and retreats to area teachers and children, as well as experiential and field education to Union College students.

The Environmental Studies Program has now been strengthened by incorporation into Union's Appalachian Regional Studies program and by the addition of an environmental scientist at the main campus. New courses in regional geography, man and environment, and geoscience are being taught, and, combined with Union's strong biology programs, offer the student a broad environmental education.

The highly successful Environmental Summer Semester of 1975 will be repeated each summer at the Environmental Center. This five-week, interdisciplinary, residential program for graduate teachers and mature undergraduates offers 6 hours credit for intensive classroom and field work on environmental issues in the Appalachian region. Special attention is given to environmental education.

With further definition and development of a modeling project, a formal 30 hour "Environmental Studies Area" will be available to interested students in the Fall 1976. The "Area" will include, in addition to courses and activity outlined above, systematic interaction with students and study in Union's other Appalachian programs in the social science and humanities areas.

MEDICINE AND DENTISTRY

The Bachelor of Arts degree will be granted to students who have completed three years of work at Union College and one year of work at any accredited medical or dental school with the provisions stated in the section on Combined Degrees.

BIOLOGY

Requirements for a Major: Thirty semester hours, including 131, 132 and sixteen hours chosen from the following: 231, 232, 233, 234, 241, 331, 332, 315, 361 and 362, twelve semester hours in chemistry, eight semester hours in physics, and seven semester hours in mathematics or statistics.

Requirements for a Minor: Twenty-one semester hours in biology.

***Biology 131. Introductory Biology I.** **(F)** *Four hours*
An introduction to some of the fundamental concepts in biology followed by a study of the major groupings of organisms, organic evolution and ecology. Laboratory work dealing with these topics included. Either 131 or General Science 111 but not both may be applied toward the natural science requirement.

***Biology 132. Introductory Biology II.** **(S)** *Four hours*
A study of energy transformation, organismal physiology, genetics and development. Laboratory work on these topics included. Prerequisite 131.

***Biology 191. Medical Terminology.** **(F)** *Two hours*
The study of the specialized terminology of biology and medicine.

***Biology 231. Animal Biology.** **(F)** *Four hours*
A study of the morphology, physiology, ecology, and evolution of the organisms in the animal kingdom. Prerequisite 132. (Odd years only.)

***Biology 232. Plant Biology.** **(on demand)** *Four hours*
The course acquaints the student with the various fields of study in botany. Topics covered include seed development, taxonomy, structure and function, behavior, photosynthesis, respiration, and genetics. *Prerequisite:* 132.

***Biology 233. Survey of the Plant Kingdom.** **(S)** *Four hours*
An investigation of the diverse forms of plant life from the bacteria to the flowering plants. Emphasis is on life histories, evolutionary relationships, and diagnostic characteristics. Prerequisite 132. (Even years only.)

***Biology 234. Microbiology.** **(F)** *Four hours*
The morphology, physiology, and taxonomy of bacterial and other microorganisms. Their roles in industry; the soil, sewage, water, and air; foods; and disease are considered. Cultivation and observation techniques in laboratory. Prerequisite 132.

***Biology 241. Fundamentals of Ecology.** **(S)** *Four hours*
An introduction to ecological studies. The course will acquaint students with the basic interrelationships between organisms and their nonliving environment. Both field and laboratory projects will be undertaken. Prerequisite 131 or General Science 111.

***Biology 315. Vertebrate Biology.** **(F)** *Four hours*
Lectures will deal with the anatomy, physiology, taxonomy, evolution, distribution, ecology and behavior of vertebrate animals. Laboratories will center on a study of the taxonomy and ecology of species occuring in Southeast Kentucky. Prerequisite 132.

***Biology 321, 322, 323. Field Biology.** **(Sum)** *Four hours each*
A series of courses offered during the summer at the MACCI Biological Field Station on Norris Lake near LaFollette, Tennessee. The courses will vary from year to year. Limnology is usually offered yearly; other possibilities are entomology, forest ecology, and plant taxonomy. Prerequisite 132.

***Biology 331. Animal Physiology.** **(S)** *Four hours*
A study of the functions of the organ systems of animals. Prerequisite 132 and Chemistry 112. (Even years only.)

***Biology 332. Cell Biology.** **(S)** *Three hours*
A study of structure and function at the subcellular level. Emphasis will be on energy flow, and on synthesis of DNA, RNA, and protein. Prerequisite 132 and Chemistry 112.

***Biology 361. Genetics.** **(S)** *Three hours*
Fundamental principles of heredity in plants, animals, and microorganisms. Prerequisite 132 and Chemistry 112. (Odd years only.)

***Biology 362, 363, 364. Cell Biology and Genetics Laboratory.** **(S)** *One hour each*
A laboratory investigating the molecular biology of virus. Principles of cell biology and genetics will be illustrated. Independent laboratory work and individual responsibility for successful completion of each experiment will be expected. Prerequisite 332 or concurrent enrollment in 361. (Odd years only.)

Biology 495. Special Problems. *Four hours*
An introduction to the methods of scientific research for the advanced student who has demonstrated ability to do independent work in biology. It will consist of a particular problem chosen after consultation with the instructor. A typewritten and bound report may be required. An examination may or may not be given, depending on the nature of the problem. *Prerequisite:* Consent of the instructor.

CHEMISTRY

Requirements for a Major: A student must take the following courses: Chemistry 111-112, 212, 214, 311-312, 412. The major is required to take Physics 211, 212, 311 and Mathematics 241-242.

For those desiring to concentrate more heavily in the field of chemistry in order to meet requirements of graduate schools and standards set by the American Chemical Society, it is suggested the major be expanded to include some of the following: Chemistry 402, 431, 495. Those embarking on this course should obtain approval of the Head of the Department at the beginning of the second year.

Requirements for a Minor: Twenty-one semester hours which should include 111-112.

***Chemistry 111-112. General Chemistry.** **(F,S)** *Four hours*
Designed to develop the cultural values of the stated objectives above and to serve as a foundation for later Chemistry courses. Laboratory work designed to support and elaborate classroom discussions. Second semester laboratory includes qualitative inorganic analysis.

***Chemistry 212. Quantitative Analysis.** **(F)** *Four hours*
A study of important volumetric and gravimetric analyses presented from a modern theoretical standpoint. Also an introduction to the study of advanced methods of analysis including some newer instrumentation techniques. *Prerequisite:* Chemistry 112.

***Chemistry 214. Topics in Chemistry—Bonding, Equilibrium, Thermodynamics.** **(S)** *Four hours*
A more detailed study of bonding, equilibrium, and thermodynamics for the chemistry major or other pre-professional student. *Prerequisite:* Chemistry 112. (Even years only.)

***Chemistry 302. Instrumental Analysis.** **(on demand)** *Four hours*
An introduction to the study of instrumental analysis. Applied theory and laboratory experiments on the various types of spectrophotometry, electrochemical methods, radioisotope techniques, and some of the more advanced instrumentation such as electron microscopy, mass spectroscopy, X-ray diffraction, and magnetic resonance.

***Chemistry 311-312. Organic Chemistry.** **(F,S)** *Four hours each*
A thorough course in the chemistry of organic compounds. Unitized laboratory work designed to illustrate the basic principles of organic chemistry. *Prerequisite:* Chemistry 112.

***Chemistry 402. Qualitative Organic Chemistry.** **(on demand)** *Four hours*
Course presents methods of identification of individual organic compounds and separation and identification of mixtures of complex organic compounds. *Prerequisite:* Chemistry 311.

***Chemistry 412. Physical Chemistry.** **(S)** *Four hours*
A study of theoretical chemistry as applied to the structure of atoms and molecules; relationships between structure and chemical and physical properties; kinetics; radiochemistry. *Prerequisite:* Mathematics 241, Physics 211-212.

***Chemistry 431. Biochemistry.** **(on demand)** *Four hours*
A study of carbohydrates, proteins, lipids, vitamins, hormones, and enzymes as related to plant and animal life. Included is a discussion on RNA, DNA, genetic code system, intermediary metabolism, and integrated metabolism. *Prerequisite:* Chemistry 211-212, 311.

Chemistry 495. Special Problems. **(F,S)** *One to Four hours*
This is an introduction to the methods of scientific research. The course is designed for the advanced student who has demonstrated ability to do independent work in Chemistry. It will consist of a particular problem decided upon after consultation with the instructor. Upon conclusion of the work a typewritten and bound report-thesis may be required. An examination may or may not be given, depending on the nature of the problem. *Prerequisite:* Permission of the head of the department.

GENERAL SCIENCE

Neither a major nor a minor is offered.

***General Science 100. Man and His Environment.** **(F)** *Four hours*
A multidisciplinary discussion of the effects of man's activities in his environment. Specific problems will be identified and their nature explored; field trips will be conducted; independent study projects will be required.

***General Science 110. Human Biology.** **(S)** *Four hours*
The study of man from a biological point of view. Emphasis on structure physiology, reproduction, and genetics. Laboratory studies are included. This course does not apply toward a biology major.

***General Science 111. Fundamentals of Biology.** **(F)** *Four hours*
The topics of ecology, environmental concerns, evolution, and animal behavior will be emphasized. This course does not apply toward a biology major.

***General Science 112. Physical Science.** **(F)** *Four hours*
An introductory course dealing with the historical development of science as a human endeavor; observations, model building, science as a process, inquiry, great principles in science using an energy theme,man's relationship to earth and his use of technology to solve environmental problems. *Prerequisite:* High school algebra or mathematics 100.

***General Science 114. Introduction to Astronomy.** **(S)** *Four hours*
An introduction to the elements of astronomy. Constellation identification, telescope operation, properties of the moon and planets, solar features, stars, galaxies, and cosmology.

General Science 401. Science: Concepts, Processes, and Inquiry. **(S)** *Three hours*
The student will examine the processes of science such as collecting data, measuring, predicting, formulating hypotheses, experimenting, etc. With the laboratory materials from the new science programs he will explore their use in teaching children these processes. As materials from such programs as ESS, SCIS, IME, IIS, ISCS, PSSC, PHYSICS, CHEMS., etc., are used, the basic concepts as well as content of science will be reviewed. The inquiry approach to teaching science will be stressed along with individualized instruction, learning theory, laboratory equipment use (commercial and homemade) and multimedia instruction. Natural science credit for education majors only.

***General Science 469.** **(Sum)** *Six hours*
A five week residence workshop for in-service teachers and mature undergraduates, with emphasis on environmental education and issues. The course treats physical, ecological, cultural and socio-economic aspects of the Appalachian setting. Conducted at the Environmental Center, Cumberland Gap.

MATHEMATICS

Requirements for a Major. Thirty semester hours consisting of mathematics courses numbered 241 and above, Physics 211 and 212.

Requirements for a Minor. Twenty-one semester hours consisting of mathematics courses numbered 203 and above.

Mathematics 100. Elements of Mathematics. **(F)** *Three hours*
This course is intended for students with a weak background in high school Algebra who plan on taking other mathematics courses, elementary statistics, business mathematics, computer science, chemistry, or physical science. The course includes a review of the real number system and topics selected from the following: sets, logic, graphs, algebraic equations, ratio and percent, probability, exponents and radicals, logarithms, and the definition of trigonometric functions.

***Mathematics 111. College Algebra and Trigonometry.** **(F,S)** *Four hours*
Basic algebraic and trigonometric definitions and operations; elements of set theory; exponents and radicals; linear, quadratic and trigonometric equations; graphs, functions and inverse functions; use of trig and log tables; radian measure; solution of triangles; probability and permutations. *Prerequisite:* High school algebra or equivalent. Does not count toward major or minor.

***Mathematics 203-204. Structure of the Number Systems.** **(F,S)** *Three hours each*
Historical development of the numeration system from an intuitive to a logical approach based upon set theory, definitions of the basic operations on whole numbers and their properties; extended to integers, rationals, and irrationals; study of why and how of algorithms for all operations; topics in informal geometry.

Mathematics 241. Introduction to Calculus and Analytic Geometry.** **(S)Four hours*
Inequalities, the straight line, conic sections, limits, the derivative, differentiation of algebraic functions, applications of the derivative, extrema, and the antiderivative. *Prerequisite:* Mathematics 111 or permission of instructor.

***Mathematics 242. Intermediate Calculus and Analytic Geometry.** **(F)** *Four hours*
The integral, applications of the integral, logarithmic and exponential functions, trigonometric functions, hyperbolic functions, techniques of integration, L'Hospital's Rule and indeterminate forms, and improper integrals. *Prerequisite:* Mathematics 241.

***Mathematics 243. Advanced Calculus and Analytic Geometry.** **(S)** *Four hours*
Topics selected from polar coordinates, vectors, solid analytic geometry, partial differentiation, multiple integration, infinite series, and differential equations. *Prerequisite:* Mathematics 242.

***Mathematics 331. Introduction to Linear Algebra.** **(F)** *Three hours*
Vector algebra in Euclidean spaces, lines and planes in space, matrices and linear equations, groups, and rings. *Prerequisite:* Math 111 and the permission of the instructor. (Odd years only.)

***Mathematics 332. Linear Algebra.** **(S)** *Three hours*
Vector spaces, subspaces, linear independence, linear transformations, determinants, inner product spaces, orthogonality, and unitary transformations. *Prerequisite:* Mathematics 331. (Odd years only.)

***Mathematics 355. FORTRAN Programming for Science Problems.** **(on demand)** *One hour*
The use of FORTRAN Programming for topics in science and mathematics. *Prerequisite:* Computer Science 233.

***Mathematics 372. Probability and Mathematical Statistics.** **(F)** *Three hours*
Theoretical probability using point set approach; probability as a frequency ratio; probability for finite sample spaces; conditional probability; joint and continuous distributions binominal distribution; Baye's theorem; statistical applications of probability; theory of sampling and variance. *Prerequisite:* Mathematics 242, which may be taken concurrently, and permission of the instructor. (Even years only.)

***Mathematics 401. College Geometry.** **(on demand)** *Three hours*
Historical introduction to Euclid's elements, logic, points, lines, planes, real numbers and the ruler axiom, separation in the plane and in space, angles and the protractor axiom, congruence, circles, and spheres. *Prerequisite:* Mathematics 241 and permission of the instructor.

***Mathematics 402. Functions of a Complex Variable.** **(S)** *Three hours*
Complex numbers, analytic functions, elementary functions of a complex variable, Cauchy's formula, Liouville's theorem, Laurent's series, residues, contour integration,, conformal mapping, physical applications. (Odd years only.)

***Mathematics 403. Introduction to Analysis I.** **(F)** *Three hours*
Sets and functions, topological ideas, LUB property, real sequences, continuity, mean value theorems, integration, definite integrals, Taylor's theorems, improper integrals, convergence of infinite series, power series, improper integrals with parameter. (Odd years only.)

***Mathematics 404. Introduction to Analysis II.** **(On demand)** *Three hours*
Differentiation, inverse functions, implicit function theorems, applications to geometry and analysis, differential geometry and vector calculus, integration over curves and surfaces, differential forms, theorems of Green, Gauss, and Stokes, field theory, calculus of variations.

***Mathematics 471. Differential Equations.** **(S)** *Three hours*
Differential equations of first order and first degree, differential equations of first order and higher degree, differential operators and linear differential equations, reduction of order. *Prerequisite:* Mathematics 341. (Even years only.)

Mathematics 495. Independent Study. **(F,S)** *Three hours*
Independent work on topics selected to meet the student's needs. For Mathematics majors only *Prerequisite:* Senior standing and permission of the instructor. May be offered in either semester.

PHYSICS

Requirements for a Major: Thirty semester hours consisting of Physics numbered 211 or above. Chemistry 111-112.

Requirements for a Minor: Twenty-one semester hours consisting of Physics numbered 211 or above. Chemistry 111-112.

Physics majors and Engineering Students will normally take Physics 211, 212; and Math 111, 241, and 242 during their freshman and sophomore years.

Physics 111-112 is intended for Life Science students and other non-science students.

***Physics 111-112. Elements of General Physics.** **(F,S)** *Four hours each*
Mechanics of motion and equilibrium; properties of solids, liquids and gases; thermal phenomena; wave motion and vibrations; electricity and magnetism; optics; topics in modern physics. Does not count toward major or minor. *Prerequisite:* Mathematics 111.

***Physics 211. General Physics.** **(F)** *Four hours*
Mechanics of solids, liquids, and gases; laws of thermodynamics; kinetic-molecular theory; vibrating bodies; standing waves; Doppler effect. *Prerequisite:* Mathematics 241, which may be taken concurrently.

***Physics 212. General Physics.** **(S)** *Four hours*
Laws of Coulomb, Faraday, Ampere, Ohm, Joule, and Lenz; electromagnetic theory; lenses, prisms, and mirrors; polarization; photo-electric and Compton effects; nuclear energy; waves and corpuscles; relativistic effects. *Prerequisite:* Physics 211. Satisfies all specific objectives listed.

***Physics 311. Heat and Thermodynamics** **(F)** *Four hours*
Thermodynamics systems and processes, equations of state, PVT surfaces of real substances, laws of thermodynamics, energy equations, enthalphy, entropy, and thermodynamic potentials, applications of thermodynamics to simple systems, kinetic theory. *Prerequisite:* Phys 212, and Math 242. May be taken Concurrently.

***Physics 312. Electricity and Magnetism.** **(S)** *Four hours*
Electric charges, forces, fields and potential with associated magnetic forces and fields; dielectric theory; capacitance, inductance, resonance, oscillation; series, parallel DC and AC circuits; measuring instruments; thermo-devices, electromagnets; motor and generator principles; transformers; Maxwell's equations and electromagnetic waves. *Prerequisite:* Physics 212 and Math 241. (Even years only.)

***Physics 401. Physical Optics.** **(on demand)** *Four hours*
Geometrical optics, propagation and superposition of waves, interference, diffraction, absorption, dispersion, polarization, interference of polarized light and double refraction. *Prerequisite:* Physics 212 and Math 241. Alternate years.

***Physics 410-411. Theoretical Mechanics.** **(410-S, 411 on demand)** *Three hours each*
Kinematics and dynamics of particles and rigid bodies, damped and forced oscillator, motion under central force, moving coordinate systems, holonomous mechanical systems and equations of Lagrange and Hamilton. *Prerequisite:* Physics 211 and Math 241. Alternate years.

***Physics 412. Atomic and Nuclear Physics.** **(on demand)** *Three hours*
Introduction to wave mechanics, spectra and structure of atoms and molecules, aggregates of atoms, structure of nucleus, elementary particles and nuclear energy. *Prerequisite:* Physics 212 and Math 241. Alternate years.

Physics 495. Independent Study. **(F,S)** *Three hours*

RADIOLOGIC TECHNOLOGY

A joint program in Radiologic Technology has been developed between Union College and Pineville Community Hospital. The program consists of 21 months of course work in math, science, and liberal arts at Union College and clinical work and professional courses in radiologic technology at Pineville Hospital. Upon completion of this part of the program, students will receive the A.S. degree in Radiologic Technology, and begin a six-month internship at Pineville Hospital. At the completion of the internship period, the students are eligible to write the National Registry Examination for certification as Registered Radiologic Technologists.

This program is open to a limited number of students. Applicants to the program must have two units of high school science and two units of high school math. An interview with the faculty in radiology may be required for admission to the program.

Curriculum — Radiologic Technology

Freshman year		Fall	January	Spring
English 111, 112	Freshman Composition	3		3
Health 340	Anatomy and Physiology	3		
Biology 191	Medical Terminology	2		
Rad. Tech. 100	Intro. to Radiologic Technology (PH*)	1		
Rad. Tech. 111, 112	Principles of Rad. Exposure I, II (PH)	2		4
Rad. Tech. 121, 230, 231	Rad. Positioning I, II, III (PH)	2	3	2
Mathematics 111	Algebra and Trigonometry			4
Electives**		3		3

Summer		
Rad. Tech. 215	Radiation Protection	1 hour
Rad. Tech. 220	Special Rad. Procedures	2 hours
Rad. Tech. 224	Radiation Therapy	1 hour
Rad. Tech. 225	Nuclear Medicine	2 hours

Sophomore year				
Physics 111, 112	Elements of General Physics	4		4
Rad. Tech. 113, 114	Principles of Rad. Exposure III & IV (PH)	4		2
Rad. Tech. 232	Rad. Positioning IV (PH)	5		
Rad. Tech. 101	Departmental Administration			1
Rad. Tech. 227	Survey of Diseases			1
Rad. Tech. 211	X-Ray and Radium Physics		2	
Elective**		3		3

Internship— 25 weeks (PH)

*Taken at Pineville Hospital

**General Studies electives of which 6 hours must be selected from the Humanities and 6 hours from the Social Sciences of which one course must be Psychology 111.

Radiologic Technology 100. Introduction to Radiologic Technology. **(F)** *One hour*
A brief history of the radiologic profession, the basic conduct and ethics of a radiologic technologist, and fundamentals of radiation safety and protection. The course includes a description of hospital office procedures and the administrative organization.

Radiological Technology 101. Departmental Administration. **(S)** *One hour*
A description of the planning and operations of the Radiology Department. Particular emphasis is placed on work flow, scheduling, inter- and intra-departmental relationships and communication.

Radiological Technology 111. Principles of Exposure I. **(F)** *Two hours*
An examination of the theory of x-ray technique and radiographic accessories necessary to produce safe levels of radioactive energies for radiographs. The course includes the developmental process necessary to produce artifact free radiographs.

Radiologic Technology 112. Principles of Exposure II. **(S)** *Four hours*
The controlled use of radiation producing equipment. The essentials of the radiograph and image formation. Studies relative to the formulation and use of technique charts. The course will include film critique.

Radiologic Technology 113. Principles of Exposure III. **(F)** *Four hours*
Detailed application of x-ray technique and introduction to radium physics. Study of the radiographs produced by the controlled use of radium.

Radiologic Technology 114. Principles of Exposure IV. **(S)** *Two hours*
A detailed study and critique of the radiographs produced. Independent work from the students will be expected.

Radiologic Technology 121. Radiographic Positioning I. **(F)** *Two hours*
A study of body planes and positions. Anatomy and the positioning technique used to demonstrate the anatomical part to be radiographed with emphasis on the extremities, skull, chest and abdomen. Emphasis will be placed on the surface and marks used to localize body organs.

Radiological Technology 211. X-ray and Radium Physics. **(Jan)** *Two hours*
A study of the fundamental laws of magnetism and electricity as applied to the production of x-rays.

Radiologic Technology 215. Radiation Protection. **(Sum)** *One hour*
Instruction in the benefits and hazards of radiographic equipment and proper use of protective devices.

Radiologic Technology 220. Special Radiographic Procedures. **(Sum)** *Two hours*
This course is concerned with special radiographic and surgical equipment employed in the highly technical investigation of internal conditions. This area of study will include field trips to x-ray departments that have special equipment.

Radiological Technology 224. Radiation Therapy. **(Sum)** *One hour*
The use of radiation and radiosotopes sources used for the cure and palliative treatment of disease. Portions of the course will be presented at the University of Kentucky.

Radiologic Technology 225. Nuclear Medicine. **(Sum)** *Two hours*
A specialized field in the use of radionuclides for diagnosis and therapy. This course will contain didactic material plus clinical experience in the Nuclear Medicine Department at Pineville Hospital. Intended to familiarize the student with this rapidly expanding area of medicine.

Radiologic Technology 227. Survey of Diseases. **(S)** *One hour*
Nursing procedures and techniques used in the general and special care of sick and injured patients in the Radiology Department.

Radiologic Technology 230, 231. Radiographic Positioning II & III. **(230 Jan; 231 S)** *Two hours & Three Hours*
A continuation of Radiologic Technology 121 emphasis on digestive system, urinary system and procedures using contrast media.

Radiologic Technology 232. Radiographic Positioning IV. **(F)** *Five hours*
A continuation of Radiologic Thechnology 231 with emphasis on radiographic examination of the thorax and spine.

"Often in our hurried search for knowledge we become content with facts and information that are transient and circumstantial. While it is important for us to move forward, it is also necessary that we have some quiet hours for reflection. Reflective thought allows time for the synthesis and integration of prior experiences out of which comes understanding. When we have achieved understanding we have acquired knowledge."

Deril K. Mays,

Division of Social Sciences

Deril K. Mays, *Chairman*

Behavioral Science, Psychology, Sociology, Social Work,
History, Geography, Political Science,
and the Appalachian Semester

BEHAVIORAL SCIENCE

The two departmental courses listed below are "core" courses in the Behavioral Sciences curriculum. Both courses are required as a part of the Psychology, Sociology, and Social Work majors and minors.

Behavioral Sciences 245. Statistics for the Behavioral Sciences. **(F)** *Three hours*
An introductory course to prepare students to better understand the scientific analysis of psychological and sociological phenomena. Concepts and principles of descriptive and inferential statistics.

Behavioral Science 341. Methods of Behavioral Sciences Research. **(S)** *Three hours*
Techniques of behavioral sciences research, including survey design and the collection, analysis, and interpretation of data. Lecture and laboratory.

PSYCHOLOGY

Requirements for a Major: Thirty semester hours, including Behavioral Sciences 245, 341, Psychology 111, 210, 361, 452G, and 460G.

Requirements for a Minor: Twenty-one semester hours, including Behavioral Sciences 245, 341, Psychology 111, 210, and 361.

***Psychology 111. Introduction to Psychology.** **(F,S)** *Three hours*
Emphasis on the study of human behavior and the ability of the individual to make adjustments to his environment.

***Psychology 210. Child Development.** **(F,S)** *Four hours*
Emphasis on recent child development theories with laboratory experiences with children on a one-to-one basis.

***Psychology 361. Psychology of Learning.** **(F,S)** *Three hours*
Basic concepts and principles of learning with emphasis upon human and animal laboratory studies.

Psychology 402. Counseling Theories and Techniques. **(F)** *Three hours*
Basic theories, types, and techniques of counseling. Practice in individual and group techniques of interviewing. Permission of the Department Head required.

***Psychology 411. Educational Psychology.** **(F)** *Three hours*
Basic concepts related to mental development, appraisal and diagnosis, and learning theory applicable to educational practices.

***Psychology 430. Social Psychology.** **(S)** *Three hours*
Major emphasis is on problems involved in human relations. Designed to help the individual to understand and adjust to group thought and action. Attention is given to recent psychological and sociological research in human relations.

Psychology 431. Mental Hygiene. **(on demand)** *Three hours*
Factors determining the development of personality, principles of mental health, and problems involved in the dynamics of human adjustment.

Psychology 452. Abnormal Psychology. **(S)** *Three hours*
Mental disorder, changing conceptions of normality, the more common forms of mental disorders, their psychological interpretation, principles of effective mental hygiene, and contemporary approaches to psychotherapy.

***Psychology 460. Theories of Personality.** **(F,S)** *Three hours*
Nature of personality structure and dynamics. Classical psychoanalysis, social psychological, and stimulus-response theories included.

***Psychology 461. History and Systems of Psychology.** **(on demand)** *Three hours*
Origins of psychological thought within science and philosophy, tracing the development of systems and theories within German, British, and American psychology.

***Psychology 470. Theories of Learning.** **(S)** *Three hours*
Basic fundamentals of learning theory as formulated by such theorists as Thorndike, Pavlov, Guthrie, Skinner, and Hull. Attention is given to the empirical support of various theories.

Psychology 495. Independent Study. **(F,S,Sum)** *One to three hours*

SOCIOLOGY

Requirements for a Major; Thirty semester hours, including Behavioral Sciences 245, 341, Sociology 131, 460G. Psychology 430G is strongly recommended and will be credited toward the thirty semester hour requirement.

Requirements for a Minor: Twenty-one semester hours, including Behavioral Sciences 245, 341, Sociology 131. Psychology 430G is strongly recommended and will be credited toward the twenty-one semester hour requirement.

Sociology 131. Introduction to Sociology. **(F,S)** *Three hours*
The social interaction of persons and groups; man's cultural heritage and social nature; analysis and principles of group life; forms of collective behavior; the process of socialization; social structure, interaction and reorganization, including race relations and social class; a variety of social institutions; the family, education, religion; the economy and politics; social change.

***Sociology 221. Introduction to Anthropology.** **(F,S)** *Three hours*
A survey of the archaeological and biological history of mankind as it relates to the development of man in his culture, with comparisons drawn between the cultures of primitive people and Western Civilization.

***Sociology 251. Current Socio-Economic Problems.** **(F)** *Three hours*
Scientific understanding of social problems; problem areas in contemporary American society; types of personal disorders and role impairment; the influences of social change on the structure of society. Attention is also given to the question of why certain forms of deviance become defined as social problems.

Sociology 271. Marriage and the Family. **(S)** *Three hours*
Background experiences in the lives of young people leading up to courtship and marriage; the establishment and functioning of the home, with related biological and social factors. Emphasis upon changing attitudes toward family relationships, some of the problems involved, and suggested solutions.

***Sociology 311. Human Ecology.** **(S)** *Three hours*
Population distribution, growth, composition, and its relevance to current economic, social, and political problems.

Sociology 345. Appalachian Semester Orientation Seminar. **(F,S)** *Three hours*
An introduction to Appalachian culture, including an introduction to the nature of dialects, analyzed from the viewpoint of linguistics and with reference to dialects of Appalachia.

Sociology 349. Economics and Appalachian Poverty. **(F,S)** *Three hours*
A theoretical and empirical study of the economics of poverty in Southern Appalachia with special emphasis on the major economics bases; including an examination of pertinent historical and geographic characteristics.

Sociology 353. Minority Groups. **(S)** *Three hours*
A social scientific study of the origin and organization of minorities and their effect on society, with particular emphasis on minorities in the United States.

***Sociology 371. Social Institutions.** **(F)** *Three hours*
An examination of the structure and function of social institutions, with primary orientation within the American milieu. Particular emphasis on socialization, stratification, social change, and relations among institutions. (Odd years only.)

Sociology 421. Rural and Urban Sociology. **(F)** *Three hours*
Comparative and interrelated study of urban and rural life considering physical, institutional, social and economic factors of modern life in cities and in the countryside.

Sociology 422. Social Institutions in Appalachia. **(F,S)** *Three hours*
A theoretical and empirical analysis of the cultural and social characteristics of the Appalachian Region from an institutional point of view.

***Sociology 441. Cultural Anthropology.** **(S)** *Three hours*
Principles and methods of anthropology applied to modern and primitive societies. A cross-cultural survey and analysis of social institutions, religion, art, beliefs, values, and languages of people in industrial and non-industrial societies. A critical analysis of leading theoretical ideas in the field.

***Sociology 460. Sociological Theory.** **(F)** *Three hours*
The major theories which have proved useful in investigating the nature of society are examined as cultural products, ideologies, and scientific models. Special attention is given to major figures such as Comte, Durkheim, Weber, Merton, C. Wright Mills, White, and Sorokin in the emergence and convergence of their theoretical development. Lecture and discussion in a seminar setting.

***Sociology 461. Criminology.** **(S)** *Three hours*
A theoretical and empirical approach to crime and delinquency. A general survey of juvenile delinquency, corrective institutions, and crime prevention programs. (Odd years only.)

Sociology 472. Sociology of Religion. **(S)** *Three hours*
A sociological analysis of religious belief systems utilizing the comparative or cross-cultural approach; social aspects of religion aspects of society; the impact of social and ecological forces upon religious institutions; social origins of religions and denominations and the role of religion in social control and social change. (Even years only.)

Sociology 495. Independent Study. **(F,S,Sum)** *One to three hours*

SOCIAL WORK

Requirements for a Major: A major will consist of the following forty-three semester hours: Behavioral Sciences 245, 341; Social Work 171, 241, 371, 372, 401; Sociology 131, 251, 460G; Psychology 111, 210, and 460G. It is recommended social work majors take Economics 253, 353, and Political Science 110 and 212.

Requirements for a Minor: A minor will consist of the following twenty-four semester hours: Behavioral Sciences 245, 341; Social Work 171, 241, 371, 372, and 401.

Social Work 171. Introduction to Social Services. **(F)** *Three hours*
Examination of social service agencies in the community and the programs they offer; utilizing agency staff, clientele and where appropriate student volunteer work to develop a philosophy of service.

Social Work 241. Social Welfare as a Social Institution. **(F)** *Three hours*
An analytical study of cultural traditions, value orientations, and political and economic forces which have and are contributing to the continual emergence of social welfare policies and systems in the United States. *Prerequisite:* Social Work 171.

Social Work 371. Social Work Intervention I. **(F)** *Three hours*
An introduction to social work practice theory, utilizing a social systems model of intervention with individuals and small groups. Within the model basic social work skills such as professional communication, interviewing, problem identification, purposeful utilization of community resources, purposeful observation and record keeping will be considered. *Prerequisite:* Social Work 241.

Social Work 372. Social Work Intervention II. **(S)** *Three hours*
A continuation of Social Work 371. Social systems models will be used to examine social work intervention with organizations, communities and other large groups. Skills and techniques in organizing, planning and social development will be analyzed from the viewpoint of social work roles and values. *Prerequisite:* Social Work 371.

Social Work 401. Field Instruction. **(S)** *Six hours*
Diversified field instruction, under faculty direction, in agencies, institutions, or with other social systems. Students will spend approximately sixteen-twenty-four hours a week in the field and will attend a regular seminar to coordinate the field and classroom experiences; application should be made in advance to the social work faculty. *Prerequisite:* Major, Social Work 371, and Social Work 372 taken concurrently.

Social Work 402. Specialized Field Instruction. **(on demand)** *Three-six hours*
Intensive field instruction, under faculty direction, in specialized settings to further develop social work skills. This course is optional and should be chosen by students who desire specialized preparation for a specific social service, i.e. school social work, clinical work, and social organizing. *Prerequisite:* Major, Social Work 401 and consent of faculty.

Social Work 495. Independent Study. **(F,S,Sum)** *One-Three hours*

PRE-LAW

Most law school admissions committees require a student to have a four-year college program leading to a Bachelor of Arts or Bachelor of Science degree, or equivalence, plus an acceptable score on the Law School Admissions Test. In general, law schools suggest a liberal college education rather than one that is narrow in specialization. Normally, a student will register for one of the regular degree programs and will include in his elective hours as many courses as possible from the following disciplines: accounting, history, political science, philosophy, and English.

HISTORY

Requirements for a Major: History 200 plus thirty semester hours of history and six semester hours of political science. Fifteen semester hours must be United States history and twelve semester hours must be non-United States history. The political science requirement within this major must

include Political Science 311 plus either Political Science 341 or Political Science 365. Religion 353 may be counted as History credit.

Requirements for a Minor: Twenty-one semester hours. Twelve hours must be United States history and nine hours must be non-United States history.

***History 101. United States from Colonial Beginnings to 1877.** **(F)** *Three hours*

***History 102. United States from the Reconstruction to the Present.** **(S)** *Three hours*

***History 130. Survey of Western Civilization: Ancient through Medieval.** **(F)** *Three hours*
Ancient through Medieval.

***History 131. Survey of Western Civilization: Renaissance to Present.** **(S)** *Three hours*
Renaissance to Present.

History 200. Historical Research and Methods. **(S)** *Three hours*
Gathering and criticism of data; bibliographies and aids; problems in historiography, composition analysis, and the final monograph. History majors should take this course in their sophomore year.

***History 221. Kentucky History.** **(Sum)** *Three hours*
Kentucky from colonial times to the present.

***History 241. American Economic History.** **(S)** *Three hours*
Economic history of the United States. (Even years only.)

***History 311. United States Colonial and Revolutionary Eras 1600-1815.** **(F)** *Three hours*
An examination of the major historiographical problems and conflicting historical interpretations of these eras. Topics emphasized will be Puritanism, Motivation for Settlement, Nature of Colonial Political and Social Culture, Reason for the Revolution, The Meaning of the Constitution, and the Nation's early problems. (Odd years only.)

***History 312. The Middle Period of United States History 1815-1877.** **(S)** *Three hours*
An examination of the major historiographical problems and conflicting historical interpretations; understanding why wide variations in historical writings exist of the Jacksonian and Civil War-Reconstruction Periods. Topics include Slavery and its impact, political basis of Jacksonian Presidents, Expansion, Causes of the Civil War, and the Meaning of Reconstruction. (Even years only.)

***History 313. Industrial America 1877-1928.** **(F)** *Three hours*
An examination of the major historiographical problems and conflicting historical interpretations of the writings concerning this period. Topics emphasized include the Gilded Age, Corruption, Populism, Progressivism, World War I, and the 1920's. (Even years only.)

***History 323. Latin America.** **(on demand)** *Three hours*
A survey of Latin American history from the discoveries by Columbus to the present with the major emphasis on Mexico and the Caribbean.

***History 330. Renaissance and Reformation. Europe (1350-1648).** **(F)** *Three hours*
(Even years only.)

***History 331. Early Modern Europe (1648-1815).** **(S)** *Three hours*
(Even years only.)

***History 332. Modern Europe.** **(S)** *Three hours*
A history of Europe from 1815 to the present. (Odd years only.)

***History 393. American Constitutional History: Civil and Political Rights.** **(F)** *Three hours*
An examination of the political and civil rights of the American people from the 1760's to the present. (Even years only.)

***History 442. Britain in the 20th Century.** **(S)** *Three hours*
The history of Great Britain since 1900. (Odd years only.)

***History 446. History of Russia.** **(F)** *Three hours*
The history of Russia since the 17th century. (Even years only.)

***History 470. Recent American History.** **(S)** *Three hours*
Selected topics on the Nation's history since 1900. (Odd years only.)

History 495. Independent Study. **(F,S,Sum)** *Three hours*

POLITICAL SCIENCE

Requirements for a Minor: Twenty-one semester hours.

***Political Science 110. Critical Issues in American Politics and Government.** **(F)** *Three hours*
A study of selected public policy problems facing Americans in the contemporary political context.

***Political Science 212. American State and Local Government.** **(S)** *Three hours*
The organization of the state government; state government at work; relationships between states and government at the national level; local government in counties, small towns, and large municipalities.

***Political Science 245. Contemporary International Problems.** **(S)** *Three hours*
A study of selected issues in world affairs which are of significant importance to the well-being of people in the United States and the globe.

***Political Science 311. American National Government.** **(F)** *Three hours*
A study of the structure and function of the national government in theory and in practice.

***Political Science 341. International Relations.** **(F)** *Three hours*
Study of international conflict and cooperation; war-making and peace-making; diplomacy; international economics; international law; international organizations; nationalism and internationalism; and the relationship of national and international politics and events.

***Political Science 365. Comparative Politics: The Major Western Powers.** **(S)** *Three hours*
Study of the nature of politics and the operation, function, and output of the government of Great Britain, France, the Soviet Union, and the United States.

***Political Science 371. Political Thought: Philosophy and Ideology.** **(S)** *Three hours*
The nature, scope, and methods of political science; development of political thought from ancient to modern times; the philosophy of the ideological variations, the democratic concept of the function of government. A topic examination of basic political concepts as developed in the thought of great philosophers and expressed in contemporary ideologies and forms of government. Topics studied include: freedom, equality, authority, revolution, order, justice, civil obligation, and others. (Odd years only.)

Political Science 495. Independent Study. **(F,S,Sum)** *One to three hours*

GEOGRAPHY

***Geography 241. Geography of Appalachia.** **(F)** *Three hours*
A systematic analysis of the physical, demographic, economic and cultural characteristics of the Appalachian landscape, with comparative significance for other regions. Includes field study.

APPALACHIAN SEMESTER

W. Sherman Oxendine, *Director*

OBJECTIVES

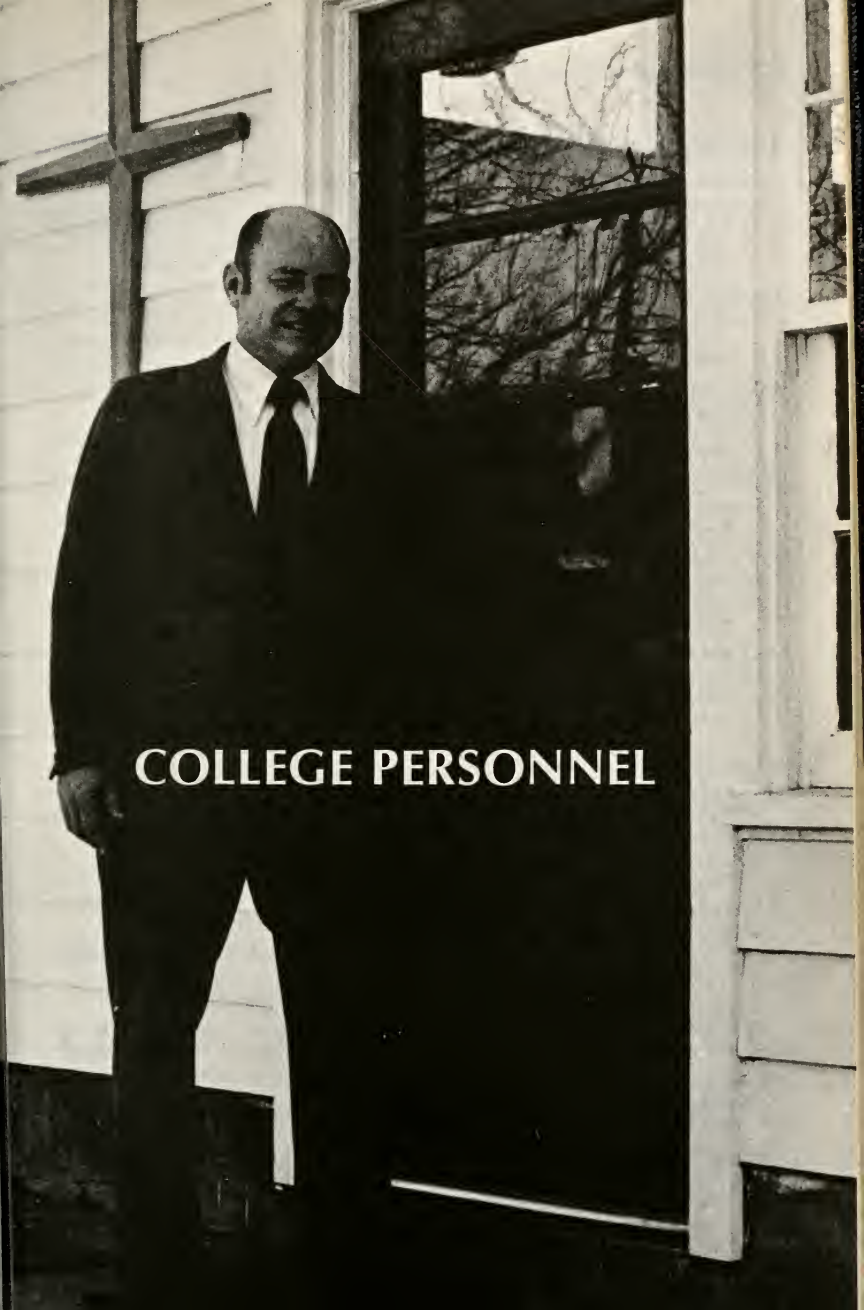
1. To provide information and activities that will assist in eliminating regional stereotypes and promote appreciation of positive aspects of the region and its people.
2. To provide an extensive, integrated, interdisciplinary body of information and opportunities for developing an integrated group of skills beyond those ordinarily obtained in a major in order to better equip individuals for careers.
3. To provide information and activities that will contribute to the development of maturity, self-understanding, and adaptability in increasingly complex environments.
4. To provide information and activities that will contribute to a better understanding of the nature of social change and the means by which the direction of change can be affected.

5. To provide opportunities for students and faculty to participate in research and direct service to the region.

Sociology 345. Appalachian Semester Orientation Seminar. Three hours
Sociology 349. Economics and Appalachian Poverty. Three hours
Sociology 422. Social Institutions in Appalachia. Three hours

Appalachian Field Practicum, designated by numbers 287 and 487, is offered at both lower and upper division levels and in a variety of academic disciplines. These are field work courses which may involve either experiential learning of a regional nature in a service agency or other institutional setting, or directed study in the region at large. Each course is offered for six hours credit, which is readily available in history, sociology, or social work. Credit in other disciplines is available on a negotiated basis. Students desiring academic credit in disciplines other than those listed above should apply for admission as early in advance as possible.

An introductory knowledge of social studies and permission of the director are prerequisites for enrollment in the program. A course in social work methods or in social research methods is highly recommended as a prerequisite for participants desiring upper division field work credit in social work and sociology respectively.



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PLEASE SEND ME INFORMATION ON:

( ) Admission
( ) Financial Aid
( ) Graduate School
( ) Summer School
( ) Appalachian Semester

( ) I would like to talk with a college representative.
( ) I am interested in transferring from another school.

Name_____ Address_____

City, State, Zip_____

Name of High School_____

Date of Graduation_____ Home Phone_____

Academic or Career Interest_____

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( ) Financial Aid
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City, State, Zip_____

Name of High School_____

Date of Graduation_____ Home Phone_____

Academic or Career Interest_____

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UNION COLLEGE

BARBOURVILLE, KY. 40906

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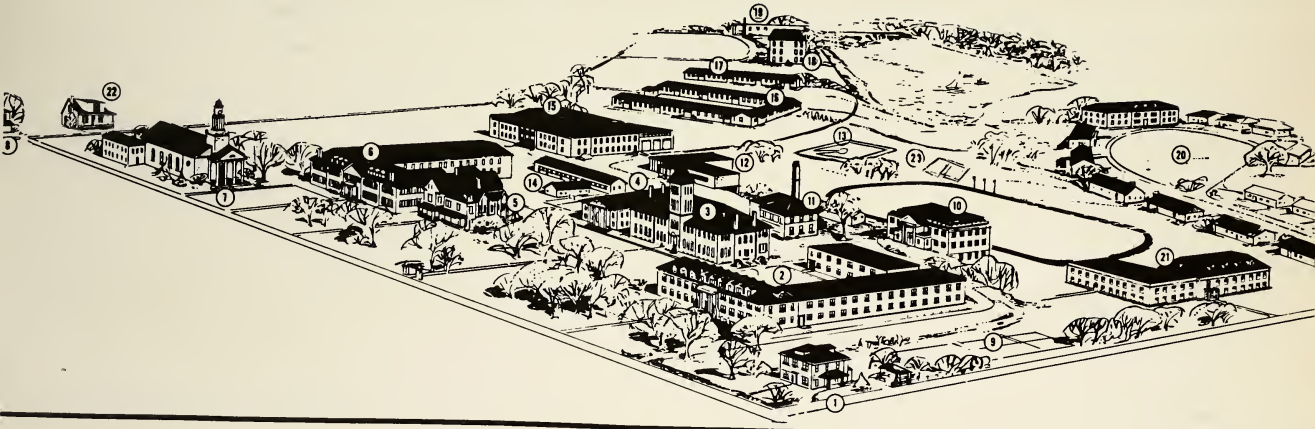
BARBOURVILLE, KY. 40906



1. Baldwin Place, President's Residence
2. Stevenson Hall, Men's Residence
3. Classroom Building
4. Library
5. Speed Hall, Administration Building
6. Pfeiffer Hall, Women's Residence
7. Conway Boatman Chapel—Fine Arts Building
8. Home Economics Building
9. Tennis Courts
10. Dramatic Arts Center
11. Data Processing
12. Student Center
13. Colonel Sanders Field
14. Religious Life Center
15. Physical Education Building and Swimming Pool
16. College Courts, Married Students' Apartments
17. College Courts Addition
18. Lakeside Hall, Men's Residence
19. Bureau of Mines Education Center
20. College Park, Faculty Housing
21. Mahlon Miller Science Center
22. Manchester Street Building
23. Tennis Courts

UNION COLLEGE IN KENTUCKY

1977-78 Undergraduate Catalog

Vol. XXXIX UNION COLLEGE BULLETIN No.
March, 1977

PUBLISHED QUARTERLY
UNION COLLEGE
BARBOURVILLE, KENTUCKY 40906

Entered as a second-class matter at the post office at Barbourville, Kentucky, 40906, under Act o
Congress, August 24, 1912.

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TELEPHONE COMMUNICATION

A campus-wide network of telephones enables the caller to reach any administrative or staf office by dialing the central switchboard. After 11 p.m., emergency calls for students may b directed to their dormitory counselor.

Central Switchboard	(606)	546-4151
Counselor, Pfeiffer Hall	(606)	546-3421
Counselor, Lakeside Hall	(606)	546-4849
Counselor, Stevenson Hall	(606)	546-3659

Union College is accredited by the Southern Association of Colleges and Schools, the Kentucky State Department of Education, and approved by the University Senate of the United Methodist Church.

It is the policy of Union College not to discriminate on the basis of sex, race, color, or national and ethnic origin in the admission of students or in its administration of educational programs, scholarships, loan programs, athletic participation, or other school-administered programs. Inquiries should be directed to Mr. Edward Black, Affirmative Action Coordinator.

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Mahlon A. Miller,
President of the College

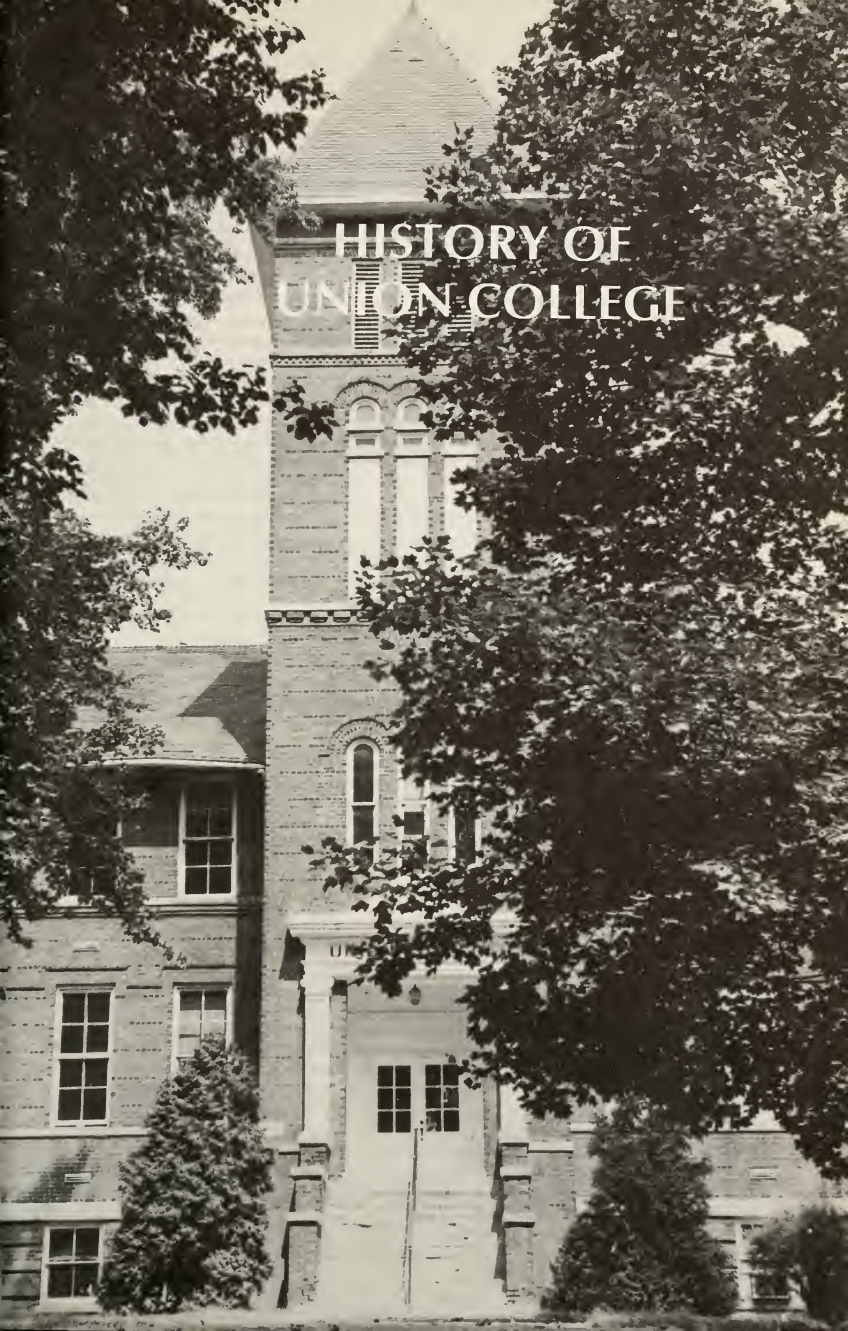
A COLLEGE WITH A MISSION

Union College, affiliated with The United Methodist Church, is a nonsectarian coeducational institution serving students without regard to race, color, and national or ethnic origin. The college emphasizes stimulating teaching, and a concern for individual needs and strength of character. Classes are small, the curriculum is flexible, opportunities for counseling and guidance are abundant, and widespread student involvement in institutional governance aids in the development of responsible leadership.

While it is recognized that Union College cannot be all things to all people, the institution provides a variety of educational programs. Union College offers the following types of educational alternatives: updated and restructured liberal arts bachelor's degree programs; professional and pre-professional bachelor's degree curricula; Appalachian Regional Studies; occupational-oriented certificate and associate degree programs; master's and Ed.S. degree curricula in education; and special non-degree continuing education for upgrading occupational skills and/or personal enrichment.

The institution's primary mission is to help improve the quality of life and living conditions in Appalachia by serving the people of Appalachia. The college offers a variety of quality programs that are attractive to a broad spectrum of students, provides for all students the basis for understanding the distinctive features of Appalachia, provides students with alternative approaches to learning and acquiring a degree, structures the curricula in such a manner as to implement the career ladder concept, assists students in planning and preparing for life and for careers, and delivers services directly to the people of the nearby region.

The campus atmosphere stimulates intellectual curiosity and academic competence, encourages commitment to Christian ideals, and supports the development of the spiritual, social, and physical resources needed to live creatively and wholesomely in a changing world.



HISTORY OF UNION COLLEGE

Union College was founded in 1879 by a group of progressive citizens of Barbourville who formed a stock company and secured the main part of the present campus. In 1880 the first building was formally opened on the site of what is now known as the Classroom Building.

The college was purchased by the Kentucky Conference of the Methodist Episcopal Church in 1886, and Daniel Stevenson, President of Augusta Collegiate Institute at Augusta, Kentucky, was made President of the reorganized institution. A major bequest from Mrs. Fanny Speed led to the construction of Speed Hall, Stevenson Hall, and the Classroom Building.

The college department was discontinued in 1908 and for eight years the institution was maintained as a Junior College, an academy, and an elementary school. It became a *bona fide* college again in the Presidency of Ezra T. Franklin, who inaugurated a program of development during which the Memorial Gymnasium and a home for the President were built, and the invested funds of the college were materially increased. In 1927 the College was accredited by the University of Kentucky as a four-year college of A grade.

President John O. Gross emphasized the improvement of the curriculum and the building of a strong faculty. His ambition was to see Union College fully accredited. In 1931 it was accredited by the University Senate of the Methodist Episcopal Church, and in 1932 full accreditation was realized when it was made a member of the Southern Association of Colleges and Schools. The Board of Regents of the University of the State of New York placed Union College on its accredited list in 1937. During this administration, land adjacent to the campus was purchased, a maintenance building was erected, and the financial structure was reorganized.

In Conway Boatman's twenty-one years of leadership, the college achieved marked progress in both its educational and plant improvement programs. Seven new buildings were completed and others were enlarged. The curriculum was expanded, endowment funds were increased, and a markedly improved program of faculty salaries and benefits was adopted.

Mahlon A. Miller was elected to the presidency in 1959. In 1960 a Master of Arts in Education degree program was introduced and plant expansion continued with the development of College Park, a faculty residential area, followed by the construction of additional student housing, a physical education building and a student center. The latest addition, a science center, was completed in 1973.

The college has always accepted a special mission to Appalachia, a thrust that is now being strengthened with unique academic programs based on regional characteristics, expanded student financial aid, student community service projects, and new career-oriented curricula. As the college moves toward its centennial, it is expanding and enriching its service to Appalachia while at the same time fulfilling the needs of the many students from other states who come to Union College for an education.

Location, Campus and Buildings

Union College is located in Barbourville, a residential town of 3,500, on U.S. highway 25E midway between Lexington, Kentucky, and Knoxville, Tennessee. The historic Wilderness Road runs along the eastern edge of the campus. Cumberland Gap National Historical Park, the location of the Union College Environmental Education Center, is thirty miles away. The Doctor Thomas Walker State Park is four miles from the campus and in adjoining counties are the Cumberland Falls State Park, the Levi Jackson State Park, and the Pine Mountain State Park.

The county seat of Knox County, Barbourville is served by Greyhound buses enroute to Knoxville, Lexington, Louisville, and Cincinnati. The London-Corbin Airport, approximately thirty miles from the campus, is served by the Piedmont Airlines.

On one of the most picturesque campuses of the South, Union College is proud of its Georgian colonial buildings. Shaded by overhanging elms, the red brick buildings give the campus a majestic charm of dignity and beauty.

Speed Hall (Administration Building), 1897-1905. A gift from the estate of Mrs. Fanny Speed of Louisville, Ky. Her bequest also partially financed the Classroom Building and Stevenson Hall.

Classroom Building (formerly the Administration Building,) 1907.

Stevenson Hall — Men's Dormitory, 1907. Wings added 1956.

Dramatic Arts Center, (formerly Gymnasium), 1919; remodeled 1965.

Baldwin Place, the home of the President, 1925. The gift of Mr. and Mrs. F. E. Baldwin, Elmira, N.Y.

Maintenance Building, 1938, originally equipped by a gift from the estate of Robert Norton, New Albany, Indiana.

Abigail E. Weeks Memorial Library, 1941. Originally furnished by a gift from Mrs. Abbie E. Stewart.

Pfeiffer Hall — Women's Dormitory, 1942. Wing added 1960. The original wing was a gift from the estate of Mr. and Mrs. Henry Pfeiffer of New York City.

Home Economics Building, 1946; remodeled 1966.

Conway Boatman Chapel and Fine Arts Building, 1949.

College Courts — Residences for married students, 1954. Expanded in 1964.

Religious Life Center, 1975.

Physical Education Building, 1964, including the Swimming Pool, 1957.

Lakeside Residence Hall, Men's Dormitory, 1964.

Student Center, 1964.

College Park, 1960. Faculty residential area.

Langford Apartments, 1962. Gifts from the estates of Miss Mary Kyle Dugan and Mrs. Mary Gilbert Langford in memory of Mr. and Mrs. George Langford. Housing for faculty and staff.

Environmental Education Center, Cumberland Gap National Historical Park, Middlesboro, 1970.

Mahlon Miller Science Center, 1973.

CALENDAR 1977-78

Summer Session — 1977, First Term

June 10, Friday	Dormitories open 8 a.m., first meal in dining hall at 5 p.m.
June 11, Saturday	Registration, 10 a.m.
June 12, Sunday	Orientation for new students, 8 p.m.
June 13, Monday	Classes begin, 7:30 a.m.
June 16, Thursday	Last day to register for first term or to apply for August 1977 graduation
July 1, Friday	Last day to drop a course
July 8, Friday	First term ends, 4 p.m.

Summer Session — 1977, Second Term

July 9, Saturday	Registration, 10 a.m.
July 11, Monday	Classes begin, 7:30 a.m.
July 14, Thursday	Last day to register for second term
July 29, Friday	Last day to drop a course
August 5, Friday	Last day of classes, 4 p.m.
August 6, Saturday	Summer Commencement, 10:30 a.m.
	Last meal in dining hall at 12:00 noon; Dormitories close, 4 p.m.

Fall Semester 1977

August 26, Friday	Administrative meetings
August 27, Saturday	Faculty Meeting and Dinner
August 28, Sunday	Dormitories open 8 a.m., first meal in dining hall at noon; Parents Orientation and New Student Orientation at 2 p.m., Parents Reception, 3 p.m.
August 29, Monday	New Student Orientation and Counseling (cont'd)
August 30, Tuesday	Registration
August 31, Wednesday	Classes begin
September 10, Saturday	Last day to add a class or apply for January graduation. Record date for determination of Fall credit load
October 7 and 8	Parents Weekend and Founders Day Program
October 14 and 15	Daniel Boone Festival
October 22, Saturday	Fall vacation begins; Last meal served at noon and dormitories close at 4 p.m.
October 30, Sunday	Dormitories re-open; first meal served at 5 p.m.
October 31, Monday	Classes resume
November 1-4	Fall counseling sessions scheduled with advisors
November 4, Friday	Last day to elect Credit/Fail option
November 11, Friday	Pre-registration for January Interim
December 9, Friday	Last day to drop a course
December 14-17	Final Examinations
December 17, Saturday	Fall semester ends; last meal in dining hall at noon, dormitories close at 4 p.m.

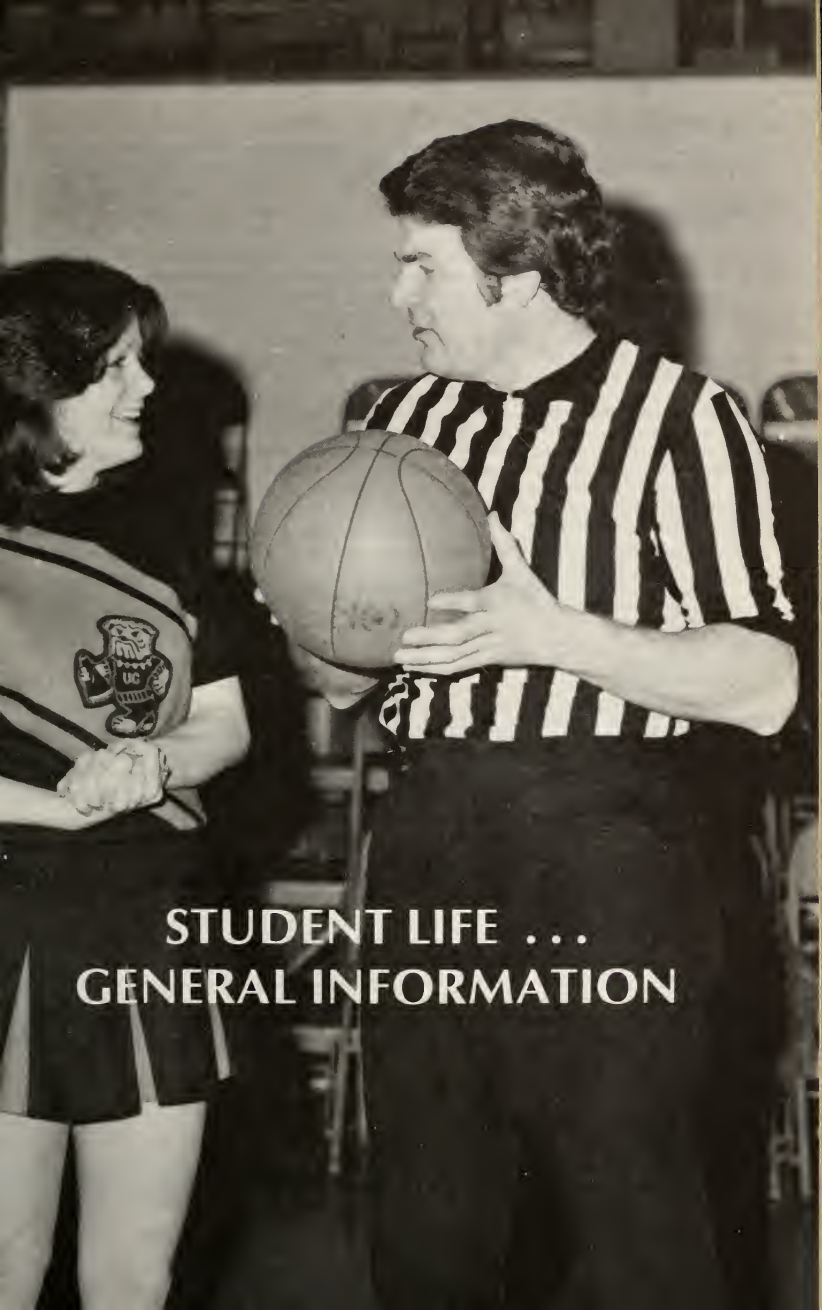
January Interim — 1978

January 2, Monday	Dormitories open 8 a.m., first meal in dining hall at 5 p.m.
January 3, Tuesday	Classes begin; Late registration in Registrar's Office
January 6, Friday	Last day to elect Credit/Fail Option
January 20, Friday	Term ends at 4 p.m.

Spring Semester — 1978

January 23, Monday	Orientation and counseling
January 24, Tuesday	Registration
January 25, Wednesday	Classes begin
February 4, Saturday	Last day to add a class or apply for May graduation
March 18, Saturday	Spring vacation begins; Last meal served at noon and dormitories close at 4 p.m.
March 27, Monday	Dormitories re-open; first meal served at 5 p.m.
March 28, Tuesday	Classes resume
March 28-31	Spring counseling sessions scheduled with advisors
March 31, Friday	Last day to elect Credit/Fail Option
May 11, Thursday	Honors Day
May 14, Sunday	Commencement
May 15-18	Final examinations
May 18, Thursday	Term ends; last meal served at noon; dormitories close at 4 p.m.
May 19-June 10	Off-Campus Intersession — field work and experiential education credit opportunities

UC



STUDENT LIFE . . .
GENERAL INFORMATION

In matters of social policy Union College is guided by the Social Creed of The United Methodist Church.

Religious Life

Union College takes seriously its identity as a church-related institution, and is concerned that its students grow in their awareness of the value of a vital Christian faith, as well as in their awareness of academic excellence. In this concern, Union College seeks to be faithful to John Wesley's affirmation that a whole person is one who unites knowledge with vital piety.

Worship and other religious services are held on campus twice weekly, are ecumenical in nature, and utilize the talents of the campus minister and other clergy, faculty and students. A vespers service, a prayer breakfast, and an open-house, which provides a setting for informal discussion of and sharing opinions about issues which are of interest to students who are seeking to grow in their understanding of Christianity, are held weekly. Celebrations of the Lord's Supper are held regularly. In addition, the Religious Life Center, in the heart of the campus, provides a setting for informal worship, study, discussion, and fellowship. The Willson-Gross Lectures, the Staley Lectures, and the "Faith and Life Week" seek to bring outstanding speakers to the campus to discuss the Christian faith. The Religious Life Committee, composed of students, faculty, and local clergy, works with the Campus Minister as an advisory group to insure that the religious life programs meet the needs of the students and campus community. From time to time, various individuals, groups, music ensembles, and films are scheduled to enrich both the religious and cultural life of the college community.

Students are encouraged to worship regularly in the church of their choice and to participate in the various denominational and faith-oriented groups on campus and in the community.

Social Life

Students are encouraged to accept every legitimate opportunity to engage in social functions. The faculty emphasizes the value growing out of well-directed social activities. Student organizations, the faculty and local churches make desirable contributions to the promotion of social life. The Director of Student Activities is responsible for the initiation and direction of a comprehensive program of student social and recreational activities. All social functions are subject to rules and regulations of the college.

Concerts of exceptional merit are given throughout the school year by students in the School of Music and by the members of the music faculty, who are all performing artists.

A joint faculty-student committee administers the student activity fee fund to provide a balance of dances, concerts, parties, movies, and other entertainment throughout the year. The Student Center Board sponsors many of the activities and other campus clubs and organizations assume responsibility for the offering of other events of interest to the entire student body.

The Cultural Events Committee and Modern Study Culture Club sponsor special speakers, films, and performances by visiting artists during the year. Major annual events include five performances by the drama department; Cabaret, a major popular music event; and the Roman Holidays, a form of the "way out games" pioneered at Union long before the television program.

A full schedule of intercollegiate athletics is available as well as clubs and organizations with their regular activities.

Student Organizations

Students have the opportunity of participating in and developing leadership through a number of campus organizations. Some of these are departmental, some are limited to honor stu-

dents in their fields, many are open to all interested students. Each has a faculty sponsor and some include faculty in their membership.

Association of Women Students — An organization to make girls dorm life better and let girls actively participate in college functions through their ideas.

Beta Chi Alpha — A cultural society, in the form of a sorority, which attempts to bring beauty, culture, and art to the campus.

Bridge Club — A club promoting interest and participation in the game of Bridge.

Cheerleaders and Drill Team — An organization to promote school spirit at Union College.

Circle-K International — A service fraternity associated with Kiwanis.

Eta Pi Sigma — An organization to promote fellowship among students interested in history and public affairs.

Gamma Beta Phi — A national honor society promoting scholarship, leadership, and good citizenship at Union College.

Home Economics Club — Sponsored by the Department of Home Economics and open to any girl interested in the field of home economics.

Iota Sigma Nu — An honor society to provide recognition for honor students by uniting them in an organization which encourages high ideals, promotes diligence in study, and rewards excellence in scholarship.

Lighthouse Singers — a volunteer Christian chorus which provides musical entertainment to churches and civic organizations throughout Kentucky.

Milesians — An organization to discuss mutual concerns in the field of philosophy.

Modern Culture Study Group — A group whose purpose is to study modern culture with an emphasis on the dramatic arts, through group discussion, films, readings, and lectures.

Mu Alpha Delta — a coeducational organization to promote social activity, fellowship, unity, and service to the college.

Mu Omega Beta — A fraernity prómoting fellowship, unity, and service to the college community.

Oxford Club — A preministerial discussion group concerned with problems that arise in the Christian ministry.

Phi Lambda Sigma — a national honor society for Sophomore men and women.

Phi Mu Alpha — a coeducational organization which fosters the mutual welfare and brotherhood of students of music and seeks to develop and encourage loyalty to the Alma Mater.

Pi Upsilon Beta — A fraternity promoting fellowship, unity, and service to college and community.

Playlikers — An organization promoting interest in the theatre.

Soccer Club — brings together those interested in the sport of soccer and participates in matches with similar organizations at other colleges.

Student Center Board — A programming board providing social and recreational activities to supplement those planned by other campus agencies.

Student National Education Association — A national preprofessional organization for men and women planning to pursue teaching as a career.

Union College Science Society — An organization to stimulate interest in the natural sciences.

General Information

Athletics

Union College is a member of the Kentucky Intercollegiate Athletic Conference and of the National Association of Intercollegiate Athletics. The college promotes athletics for physical development and as a vital part of the program of extracurricular activities. The program emphasizes the protection of the best interests of the student athlete. Union teams are noted for "clean" sport and competitive spirit. Sport for fun and character building is fundamental. In intercollegiate competition the college is represented by varsity teams in basketball, track, swimming, tennis, golf, baseball, and cross country.

Women may participate on intercollegiate teams in track, swimming, tennis, golf, and cross-country and have earned places on varsity teams in these sports in recent years. Separate women's teams are active in volleyball and basketball and compete against women's teams from other colleges and universities in the area.

Union College sponsors intramural activities in touch football, basketball, free-throwing, horseshoes, badminton, softball, tennis, volleyball, speedball, and field hockey to have a "sports for all" program. The intramural organization is, in general, made up of men's and women's independent teams. The program includes both team and individual sports. No college credit is given for intramurals but everyone is urged to take part.

Publications

Union College Bulletin — An official quarterly bulletin, one issue of which is the catalog number. The bulletin is sent free on request.

Parents' Quarterly — A publication to inform parents of activities on campus.

Orange and Black — A newspaper published by the student body.

Union College Alumnus — A quarterly bulletin published by the Alumni office.

Stespean — The yearbook, published annually by the students of the college.

The Library

The Abigail E. Weeks Memorial Library houses a collection of approximately 67,000 volumes. More than 320 periodicals are regularly received, along with indexing services to facilitate their use. It is also a selective depository for U.S. government publications. The stacks are open for use by all students. Regulations governing the use of library materials are available in the library, and freshmen students are given instruction in the use of its facilities. At the Environmental Education Center, there is a special collection of more than 500 volumes of new books on environmental concerns. This collection provides materials for environmental courses on the main campus as well as those at the center. In addition, the college houses a special Lincoln-Civil War collection containing over 500 volumes, a curriculum library in the Department of Education, and a music library with a collection of 3,500 recordings and musical scores.

A well equipped Learning Resources Center supplements the printed materials of the Library with films, slides, videotapes, and records. The Center provides educational materials for classes and individualized instruction. A complete videotape studio is scheduled for completion by late 1977.

Health Service

Union College students receive free health service and advice from the County Health Office in Barbourville. Since the college does not have facilities for taking care of protracted illness, arrangements for hospitalization must be made by the student or his parents. When a physician is needed, the student may request the dormitory counselor to call one, whose fee is paid by the student. In case of emergency, the college reserves the right to employ a physician or to have a student hospitalized without consent of the parents. During the calendar year, all full-time students are encouraged to secure coverage of an accident and sickness hospitalization plan which is arranged through Mutual of Omaha if adequate insurance is not available through a family plan at home. All claims under the student insurance plan are placed by the student and the attending physician.

Student Conduct

Each student is expected to conduct himself at all times according to the rules of good society. This obligation includes compliance with Federal, State and local laws and adherence to college regulations. As members of a free society, students are always free to peacefully and lawfully petition for amendment or modification of the various laws as well as the college regulations. However, the rights of the student body as a whole and the college as an institution of higher education exceed the rights of any individual student or any group of students. Accordingly, not in an attempt to stifle dissent, but rather to perpetuate an environment where the student may peacefully pursue his studies, actions which are disruptive to the normal functions and operations of the college will not be tolerated. Students who are disorderly in conduct, or unmindful of the rights of others, may be required to withdraw from the college.

No student shall possess or use alcoholic beverages when on college property or in college-approved facilities off campus, or when away from the campus representing the college in any way, e.g., a participant or spectator at a college athletic event or other college function. Any student violating this regulation may be required to withdraw from the College.

The sale, possession, or use of stimulant, depressant, narcotic, hallucinogenic or other drugs or substances in violation of the Federal, State, or local laws is prohibited. Any student who illegally sells, possesses, or uses such drugs will be subject to criminal prosecution by the appropriate law enforcement agencies and also may be suspended or expelled. It is the announced policy of Union College to cooperate fully with the various law enforcement officials in the enforcement of the drug laws as with all other laws. A student's lawful use and possession of certain drugs pursuant to a valid prescription from a qualified medical practitioner such as a physician, dentist, or optometrist is, of course, permitted.

Firearms of any kind are forbidden in the residence halls or on the campus. All weapons must be registered and stored by a resident fellow. Students may be expelled for failing to register firearms.

Gambling in any form is strictly forbidden.

Union College expects good housekeeping from all on-campus resident students. Persons who persist in lack of good housekeeping will be asked to withdraw from residence on the campus. The college reserves the right to enter and inspect the rooms of students at any time.

No student shall engage in disorderly conduct when on college property or in college approved facilities off campus, or when away from the campus representing the College in any way, e.g., a participant in or spectator at a college athletic event or other college function. Any student violating this regulation may be required to withdraw from the College.

Automobiles

At the time of registration for classes, all students who possess automobiles must complete an automobile registration card. Students who wish to park on campus must pay a $2.00 parking fee and affix a Union College permit. Students must meet minimum insurance requirements as set forth by the Commonwealth of Kentucky.

SPECIAL PROGRAMS

SPECIAL PROGRAMS

While retaining many traditional values in liberal arts and pre-professional programs, Union College also strives to be unique and innovative in its approach to collegiate education. These special programs offer non-traditional approaches to the earning of credit, avenues of tailoring the student's education to his or her particular needs and interests, and experiences and training in areas not ordinarily found in the small college.

Advanced Placement

Students at Union College who have had superior preparation in certain curricular areas have regularly been placed in advanced course sections. In certain cases credit will be given by an examination administered by the Head of the Department. The college will also grant academic credit to those incoming freshmen who have successfully participated in the Advanced Placement Program of the College Entrance Examination Board. Interested students should consult the publication "Advanced Placement Program" of the College Board Advanced Placement Examinations, Box 592, Princeton, N.J., and their High School Guidance Counselors. Further information on the program may be obtained from the Registrar or the Academic Vice President.

Advanced Placement for Veterans

Academic credit is granted to veterans for advanced placement, in accordance with the American Council on Education. Up to 60 semester hours may be granted, on a combined basis, from College Level Examination Program (CLEP) tests, courses approved by the U.S. Armed Forces Institute, credit from service schools, and correspondence and extension courses. Veterans with over one year of active duty are automatically awarded eight semester hours of elective credit toward graduation.

Project AHEAD

Union College has entered into an agreement with the United States Army to participate in Project AHEAD. Under this project, qualified young men and women may enroll in Union at the same time they enlist in the Army, with the Army paying 75% tuition assistance for college credits earned while on active duty.

A Career Planner will be assigned to offer counseling to the soldier/student and to maintain contact with him while he is serving in the Army. The Career Planner advises the soldier of the educational opportunities available at the installation where he is stationed and advises him concerning those courses that will apply to his curriculum at Union College. Once the soldier returns to full-time college life he is entitled to up to 36 months of educational benefits through the Veterans Administration to complete his education.

Union College accepts up to thirty semester of CLEP credits, provides eight semester hours of credit for military service, and awards additional credit for approved military training courses.

For more information on Project AHEAD contact your nearest Army representative or the Coordinator of Career Planning at Union College.

January Interim Term

During the January Interim term, special projects and courses are offered, both on and off campus. Students may select certain work-study arrangements, foreign study projects, regular

courses, and independent study projects. The tentative schedule for the January Interim is available in the spring, and final decisions and registration take place about October 1. The January Interim is intended to provide students with unusual and challenging opportunities to broaden and further their education.

College for High School Students

Superior high school students, recommended by their Principals, are permitted to take certain college freshman courses in the summer sessions between their junior and senior years in high school and between their graduation and the opening of the regular fall semester. Credit earned in these courses will be recorded after the student has been regularly admitted to college following his graduation from high school. Selected high school students may also elect some courses during their senior year. Special tuition rates are available to such students at 50% of the established summer rate.

MACCI and Oak Ridge Programs

Union College is a member of the Mid Appalachia College Council, Inc., a consortium of twelve colleges. This consortium performs many functions, but there are two of special academic significance which provide unusual opportunities for Union College students.

1. Since 1968, a series of special honors seminars has been conducted at the Oak Ridge (Tenn.) Institute of Nuclear Studies for selected MACCI majors in biology, chemistry, and physics and social sciences. These students, under the direction of the Oak Ridge Institute's professional staff, conduct experiments with specialized equipment in the realm of nuclear studies. Arrangements are planned that will provide summer employment at the Institute as research assistants for qualified students of the twelve Council colleges.
2. MACCI owns and operates a Biological Field Center on Norris Lake near LaFollette, Tennessee. Academic study at the Center is carried out during the summer terms, and correlated with courses in the biology department at Union College. Nearby mountains and many historic places are easily accessible for excursions and picnics. An organized recreational program on the campus, with swimming pool and tennis courts, is available to students.

Washington Semester

Under an agreement with the American University in Washington, D.C, Union College participates in the Washington Semester Program. Students selected to study under this program spend a full semester of their junior or senior year in Washington and are enrolled at the American University. This program affords students an opportunity to continue their college education while observing the operation of government and international agencies in the nation's capital. Detailed information on the program may be obtained from the Head of the Department of History and Political Science. (See the financial aid section for the special Robison Political Science Scholarship.)

Appalachian Regional Studies

Reflecting the college's primary mission of improving the quality of life of the Appalachian people, Union is developing a multi-faceted Appalachian Regional Studies Program. One or more components of the program should be of interest to all students. The program seeks to develop an appreciation of the people, culture, and socio-economic conditions of the mountain area; to provide opportunities for direct service, research and personal experience in the region;

to provide the skills and critical understanding needed to work in this age; and to help the student develop understanding of himself and others.

The Program at present consists of the Appalachian Semester, Environmental Studies, and ALCOR, each outlined in detail below, and of various academic courses, identified in appropriate departmental and division course listings. The student will find here an interdisciplinary approach to the history, politics, music, natural resources, economics, and other aspects of the society, which will stand him in good stead no matter where he or she may live later.

Appalachian Semester

The Appalachian Semester, which is operated twice yearly during the fall and spring terms, is a unique interdisciplinary academic program in which mature second semester sophomore, junior and senior students from Union College and other institutions throughout the United States devote their full time to studying the Appalachian region — its strengths, problems and challenges. Students earn a total of fifteen semester hours of academic credit. Nine hours of credit are offered in sociology at the upper division level, and six hours are offered at either the lower or upper division level for field work in a variety of disciplines. Field work may be either experiential learning of a regional nature in a local service agency or other institutional setting, or it may be directed study in the region at large. The program is designed to combine interdisciplinary classroom experiences and on-the-scene community experiences into a "living-learning" situation where total involvement of students and faculty may take place.

Opportunities are provided to discuss with local and regional leaders assets and problems of the region, and field trips are coordinated with seminar discussions in order to involve participants on the spot with current regional issues. Following an orientation of approximately four weeks, students travel into the area and learn through independent study or work in a variety of private and public service settings.

Course descriptions are included in the curriculum section of this catalog. Detailed information and application forms are available from the Director, Appalachian Semester, Union College.

Environmental Education Center, Cumberland Gap

Since 1970 Union College has conducted a variety of environmental programs for students and community leaders. The focal point has been the College's Environmental Education Center in the Cumberland Gap National Historical Park. This special 100 acre campus, located near the town of Middlesboro and about 35 miles south of Barbourville, includes classrooms, dormitories, dining hall, gymnasium, conference rooms, library, laboratory, exhibits, weather station, and trails. The 20,000 acres of the surrounding national park provide excellent opportunities for environmental field study. The center offers workshops, conferences and week-long residence programs to area teachers and school groups as well as to community and private organizations.

Environmental Summer Semester at Cumberland Gap

The highly successful Environmental Summer Semester will be repeated each summer at the Environmental Center at Cumberland Gap. This five-week, interdisciplinary, residential seminar for graduate teachers and mature undergraduates offers six hours credit for intensive classroom and fieldwork on environmental issues in the Appalachian region. Special attention is given to environmental education. For further information, contact the Director, Environmental Summer Semester, Union College.

Appalachian Leadership and Community Out Reach, Inc. (ALCOR)

ALCOR, Inc. is a people-to-people program designed to link health, social and educational services to people in isolated rural areas of Southeastern Kentucky. The program objectives are to: open doors of thought and experience to all involved; encourage participation and communication; develop indigenous leaders in isolated rural regions; provide a bridge between consumer and professional agencies; develop positive health and nutrition habits; offer alternatives to continued migration to urban centers; enable local students to serve their communities and to meet the expenses of their college education.

The focal points for achieving these objectives in communities are: recreation, education, health, nutrition and community development. These activities are carried out by thirty students in a ten-week summer program. Students spend forty hours a week in direct services to community residents. The ALCOR experience provides students the opportunity to supplement classroom learning with meaningful field work while earning financial resources to continue their education. Three to six hours of experiential education credit is available to students on an optional basis through the Office of Experiential Education. For application information contact the ALCOR Campus Director.

Career Planning, Academic Advising, and Placement Services

Upon admission to Union College, a student will begin a process whereby career planners and faculty advisors assist students to articulate their career goals, to select academic courses of study appropriate to those goals, and to achieve suitable placement upon completion of their studies. Career Planning Counselors will travel to the homes of new students accepted by the college before their first semester in residence in order to insure that the proper counseling and advisement can be initiated at the outset of the student's tenure at the institution. A student should therefore be insured of a smooth transition from high school to the academic environment of Union College with the appropriate services available throughout the student's tenure and beyond.

College-Level Examination Program (CLEP)

Union College is a regional testing center for the College-Level Examination Program (CLEP). The CLEP tests provide college credit for material students have mastered through self-study or through unaccredited classes. Up to 30 semester hours of credit can be earned at Union College by passing the CLEP examinations; there are five general exams and 33 in specific subject areas. As an Open Testing Center, Union administers exams the third Saturday of each month.

No charge is made for the credit earned in the general battery. A $25 fee is charged for the recording of each advanced subject examination in lieu of tuition. The general battery must be taken before the student reaches sophomore status.

Experiential Education

Certain types of off-campus work-learning activities are an integral part of various curricula at Union College. These include cooperative education, field work with social and governmental agencies, and independent research. These activities are all exercised under faculty control and supervision during the regular school term and are evaluated in terms of credit toward degree requirements.

These programs are open to Union College students with sophomore or higher rank who are not on probation.

Arrangements for off-campus work-learning experiences must be initiated by the student with the Office of Experiential Education.

Union College's Experiential Education program is approved for the training of veterans and other eligible persons under the provision of Title 38, chapters 34, 35, and 36, U.S. Code.

Individualized Major

Students may elect to develop an individualized major not listed in the catalog. Regular general education requirements must be met and the planned program is developed for a specific reason or goal of the student. The program cannot be used for a waiver of prescribed courses in existing major fields.

The major must be arranged at least one year prior to graduation from Union College and be approved by the appropriate Division Chairman, the Vice President for Academic Affairs, and the Academic Policy Committee.

Kentucky Internship Programs

Union College nominates outstanding Juniors and Seniors as candidates for the Kentucky Administrative Internship Program and the Kentucky Legislative Internship Program. Both programs select interns on the basis of competitive interviews with all Kentucky colleges nominating. Those selected work in a state agency for seven months gaining six to nine hours credit for their project, obtain nine credits for classes taught by state administrators, and earn $436 per month. The program is open to all majors and Union students have been able to complement their formal campus coursework with rewarding experiences working for state agencies in a variety of interesting areas.

Graduate School of Education

Union College offers a unique graduate program designed for in-service teachers in the public schools. The college grants the 5th year certificate for Kentucky teachers, the M.A. degree in Education in elementary education, general secondary education, health, kindergarten education, English, social studies, natural science, and a reading specialists program. Post-masters work leading to certification as an elementary or secondary school principal is available. Work leading to the Ed.S. degree was authorized in 1976 and a new Master's degree in Special Education is planned.

Qualified holders of the Bachelor's degree should contact the Assistant Vice President for Graduate Affairs for brochures, catalogs, and information about the graduate program.

Unique Majors and Minors

To meet the special needs of students who desire a non-traditional major or minor, several special programs have been devised. The Associate of Applied Science in Education was designed to serve uncertified teachers in social service programs and for Teacher Aids; the Christian Education major is designed to prepare unordained church workers such as Youth Education Directors; the School Social Worker program leads to certification of social work majors for public school application of their skills; the Business-Music major serves those who want to enter the business field while utilizing their skills in music as music store operators or owners; the Business-Home Economics major serves those who want a business career while preparing for family life; and the Environmental Science minor serves the broad spectrum of students who have a special interest in ecology and the environment.

Career Ladder Concept

Several of the Union College programs are designed so that the student may interrupt his education after two years of college to enter the world of work, and then return, without penalty, for a Bachelor's degree at some later date. Two year (Associate Degree) programs are available in accounting, computer science, radiologic technology, office administration, medical secretarial, recreation, vocational education, and elementary education.

Credit for Prior Learning

A program to evaluate the prior learning experiences of the student is under study at the present time, and expected to be operational by 1978. Limited credit may be awarded under this system to those whose non-formal education may be of value in their quest for a college degree.

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ADMISSION TO THE COLLEGE

APPLICATION FOR ADMISSION — Undergraduate

Each applicant for admission to Union College must present to the Committee on Admissions satisfactory evidence of his previous academic training and good character. He should:

1. Write to the Director of Admissions, Union College, Barbourville, Kentucky 40906, for an Application for Admission form.
2. Return the application to the Director of Admissions. No admission fee is required. Upon receiving the application for admission, the admissions office will mail the applicant a Health form and two reference forms which should be completed and returned at the earliest possible convenience.
3. Have an official transcript of all high school and previous college work mailed directly from these schools to the Office of Admissions. Only those transcripts mailed directly from the school previously attended are considered official. General Equivalency Diploma certificates will be accepted, at the discretion of the college, in lieu of a high school diploma.

Upon receipt of the application for admission, the Office of Student Affairs will mail a student information sheet/housing application. This form should be completed and returned promptly. Students not planning to live on campus should disregard the application for housing and complete only the student information portion. A refundable $40.00 room deposit should accompany the application for housing.

The child of a disabled or deceased veteran, under Public Law 864, should file an application for program of Education and Training with the Veteran's Administration which will issue a Certificate of Eligibility to attend Union College.

The Committee on Admissions will act immediately upon the receipt of all credentials and deposits. Each applicant will be notified in writing promptly thereafter.

Admission to the Freshman Class — Each applicant should submit a transcript which shows that he has graduated with sixteen units from an accredited high school with at least a "C" average, ranks in the upper two-thirds of his graduating class, and has acceptable scores on SAT or ACT tests. Ten of the units earned must be in academic subjects; three units in English, two units in mathematics, two in social studies and two in science. Foreign language is recommended. Students failing to meet these standards may be admitted if the Committee on Admissions thinks other factors warrant special consideration. The student who fails to meet these standards, but who is admitted because factors warrant special consideration, may be admitted on probation.

An applicant who has graduated from a non-accredited high school must establish his ability to pursue a college program before he can be recognized as a candidate for a degree. This may be done by completing at least twenty-four semester hours of residence study with not less than a "C" average.

An applicant, not less than 18 years of age, may be admitted on a high school equivalency certificate, based on the General Education Development tests, provided the scores earned are equal to or above the minimum recommended for college entrance by the American Council on Education.

There is open admission for all veterans and all persons twenty-one years of age and over, who have not attended another institution of higher education but who have been graduated from an accredited high school.

Freshman Orientation and Registration — Each member of the freshman class must be present at the time scheduled for Freshman Orientation. A program concerning problems peculiar to beginning students will be conducted by the faculty and a group of advanced students. The faculty of the college will be present to aid students in registering and to offer advice in choosing courses.

Admission to Advanced Standing and Transfer Students — Applicants who desire admission with advanced standing must present credits from an accredited community college, junior college, senior college, or university. The transcript of credit must show that the applicant has been honorably dismissed, that the entrance requirements of Union College have been met, and that

he has a "C" average. Students failing to attain a "C" average may be considered for admission on probation providing there is evidence that he can attain a 2.0 cumulative grade point average in a reasonable length of time. All credits earned from an accredited community college, junior college, senior college, or university can be transferred to Union College. Sixty-seven semester hours is the maximum amount of junior college or community college credit which may be counted toward a degree.

Transfer credits will be accepted at the level of the initiating institution. In case of an appeal for upper division credit when the course was taken at a junior college or as lower division work at a senior college, a committee consisting of the Registrar, the division chairman of the area involving the course, and an appointed faculty member from that discipline will review the content, text, level of work, etc. to determine if upper division credit shall be granted.

Information concerning Advanced Placement, CLEP, High School Special Program and Veterans Credit is found in the Special Programs section of the catalog.

War Orphan Education — Application should be made at the nearest Veterans Administration Office, prior to registration for college.

Admission to the Graduate Program — The applicant must file an application for admission with the Asst. Vice President for Graduate Affairs, Union College, Barbourville. Two official transcripts of all college work are required and must be mailed directly from the school previously attended. There is a $15.00 admission fee, which is refunded only when admission is denied. Graduate catalogs may be requested from the Office of Graduate Affairs.

Admission as Auditors — Students may audit some classes, with the permission of the instructor. They must register as if for credit. There is an audit fee.

Admission of Foreign Students — Foreign students must complete the regular admissions process. In addition, a $200.00 admission deposit must accompany the application. After a foreign student is accepted he must request an I-20 form from the Office of Admissions. Once the student enrolls, the $200.00 admission deposit will be applied toward his tuition.

In order to be considered for admission, a foreign student must score at the 107 level or higher on the ELS English Proficiency and Achievement report and/or score 500 or higher on the Test of English as a Foreign Language (TOEFL).

When the admission process is completed, a foreign student is obligated to stay at Union for at least one year. No official transcript or recommendation will be released until the student fulfills the year's obligation. If a student leaves before one year, he must be reported to the Immigration and Naturalization Service. One year is interpreted as two full semesters, excluding summer sessions.

The student must pursue a full course of study. Those who do drop to part-time status must by law be reported to the Immigration and Naturalization Service. No visas and/or passports will be renewed until the student's account is paid in full.

Physical Examination — Union College attempts to give aid to all students in matters of health. A thorough examination by a regular physician is required as a part of the entrance procedure of each student.

Physical Examination report forms may be obtained from the Office of Admissions and the examination should be made by the applicant's family physician. If a completely filled out medical examination report is not filed at registration, the student is required to have the examination made by a local physican, at his own expense, before registration is completed.

Room and Board — If a campus dormitory room is desired, application must be made with a reservation deposit of $40.00. No room reserved for a student will be held unoccupied beyond the day of registration unless there is a definite explanation and a request to occupy at a stated later date.

The $40 room deposit is refundable up to one year after the last date the student is enrolled at Union College. Should a student pay room deposit, and decide not to enroll at Union College,

he will be eligible for a refund up to one year from the date his deposit was received. After the refund period expires, the student forfeits his deposit to the college. A student must submit a written request to the Office of Student Affairs for the refund. Refund of room deposit is conditional upon the depositor leaving the dormitory rooms and equipment undamaged. All readmission students are assigned housing according to their new date of admittance. The readmission acceptance date becomes their room deposit date.

Room keys that are not turned in to the Office of Student Affairs at the end of the term or school year will be charged to breakage at the rate of $1.00 a key. The same rate will be charged to any student for whom it is necessary to replace keys.

Linen and towels will be provided each student living in the college dormitories. The college does not provide blankets, rugs, or curtains. Students should bring study lamps or may purchase them through the college bookstore. Light bulbs for these should not be in excess of 75 watts.

All students who room on the campus are required to board in the college dining hall unless they have permission to do otherwise, from the Dean of Students.

Off Campus — All students 21 years or older, junior and seniors (according to the Registrar's Office), veterans, and married students, can live off campus if they so desire. Juniors and seniors under 21 must have parental permission.

Liability — Union College will not be responsible for loss of personal property or bodily injury resulting from fire or other causes.

COLLEGE EXPENSES... FINANCIAL AID

The academic year of nine months is divided into two semesters and a January Interim term. The rates quoted below are for one semester. The cost of a regular session of nine months can be found by multiplying a semester's expenses by two. All checks should be made payable to Union College.

Undergraduate Expenses:

Tuition (10 to 17 semester hours)*	$ 875.00
Room	160.00
Private Room	225.00
Board (19-meal week)	300.00
Full Time Students	
Activity Fee***	15.00
Total for Boarding Student*	1350.00
Total for Non-Boarding Student**	890.00
Part-time tuition for all registration under ten or above seventeen semester hours, per semester hour	35.00

Graduate Expenses

Graduate Tuition, per semester hour	40.00
Activity ID card (required for boarding graduate students)	10.00

Summer Session Expenses:

Tuition, Undergraduate, per semester hour	35.00
Graduate, per semester hour	40.00
Room, each term	45.00
Private Room, each term	65.00
Board — full week, each term (21 meal week)	105.00
— short week (Monday breakfast through Friday lunch) each term (14-meal week)	90.00

January Term:

Board	60.00

The January Term may be considered as part of the fall semester for tuition purposes at the student's option — i.e., the student may restrict his fall load to a maximum of 14 hours and pay no tuition for the January Term. This option is available only to full-time students. The fall load will be determined by the number of hours carried as of September 10, 1977.

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*Vacation periods are not included in the quotation. Dormitories are closed during intermissions and Christmas holidays. The college reserves the right to entertain delegates to conventions and other related groups in the residence halls during vacation periods. Students will be notified in advance of such contemplated occasions and assurance given regarding the safe-guarding of their personal property during such occupancy. Due to uncertainties in the price of food the College charges for Board may, if necessary, be changed at any time without notice.

**$10.00 of this amount each semester, is designated for Student Center Construction, as voted by students December 10, 1962. $1.00 is collected for Student Senate dues, $1.00 for class dues, and $1.50 for the I.D. card.

***For Student Activities

*Note: Students in special programs which require them to be off campus regularly at meal time may make special arrangements for board through the vice-president for Academic Affairs.

The charges for individual meals in the Dining Hall are as follows: Breakfast, $1.00; Lunch, $1.20; Dinner, $1.35; Sunday noon, $1.50.

Other Expenses

Audit Fee, per semester hour	$ 10.00
Change in schedule fee	2.00
CLEP — Advanced Tests only (per test)	25.00
College Court Rental, per month (all utilities furnished)	80.00
Examination: late examination fee	1.00
late final examination fee	5.00
credit by examination (per course)	25.00
Foreign Student-Admission Deposit	200.00
Graduate Activity Fee (required for boarding graduate students)	10.00
Graduate Admission Fee	15.00
Graduation fee for Assoc. Degree or Diploma	20.00
Graduation fee for Bachelor's degree	25.00
Graduation fee for Master's degree	30.00
Graduation in absentia fee	25.00
Music: Preparatory Department: Piano, Strings, Wind Instruments	
one half-hour lesson, weekly, per semester	50.00
one-hour lesson, weekly, per semester	75.00
Music lessons: part-time and special students, per semester	35.00
Transcript — after first copy (one week's notice required)	2.00
Student Teaching Fee	50.00

Terms of Payment

Full semester's charges, room, board, tuition, and fees, must be paid no later than registration date. Should the student have an approved loan, scholarship, workshop, workstudy grant, or other form of financial assistance, such amount will be deducted from the total charges with the then net amount payable at the time of registration. The Office of Business Affairs can make no exception to this regulation. The college also reserves the right to hold a student's transcript or other academic records until all financial obligations to the school have been satisfied.

Refund Information

Since faculty contracts and other commitments are made by the college for the entire year in advance, the following refund schedule has been established in order that the college and the student may share the loss equitably when it is necessary for a student to withdraw or make a change in his program.

1. There will be no refund given for room rent unless the decision to withdraw is made by the day of registration. This rule applies to all withdrawals including students dismissed from college.
2. Board will be refunded in full amount unused to the date of withdrawal. A full week is charged for any fraction of a week.
3. Tuition will be refunded on the following basis:

   REGULAR TERM — Twenty percent of the total for tuition will be charged for each of the first five weeks. No refunds will be made on tuition after the fifth week. Any part of a week will be treated as a full week. Refund is based on tuition charges, less $10 student center allocation, $1 class dues, and $1 student senate fee.

SUMMER TERM — Fifty percent of total tuition will be charged the first week and fifty percent the second week. No refunds following the second week. Any part of a week will be treated as a full week.

Any registrant who has completed registration and who has failed to attend a single class may have his account credited for the money paid, this to apply for use on future registration within a twelve-month period.

5. **Room Reservation Deposits** — This deposit will be refunded if the request is made in writing not later than August 1 for the Fall Semester or thirty days before the opening of any other semester for which the contract is first effective. Students, once enrolled, must submit a written request with the Office of Student Affairs at least 30 days before the end of the term for cancellation of the contract. This deposit will be refunded upon receipt of written authorization by the Dean of Students indicating the depositor is no longer enrolled as a student at Union College and that he has left dormitory rooms and equipment undamaged.
6. No fees are returnable.

A student is considered to be enrolled until he formally notifies the Office of the Registrar of his withdrawal and all refunds will be based on the date of notification.

Financial Assistance

Standards for Receiving Financial Aid

Union College maintains an extensive program providing opportunities for financial assistance to promising students who need help in meeting their expenses, or who have attained particular merit in scholarship or other accomplishments. Only those students whose scholarship and character indicate leadership ability and promise of future usefulness will be approved for aid.

Students receiving financial assistance may be deprived of their aid at any time if they are negligent in the performance of their duties, careless in their conduct, or unwilling to cooperate fully with the policy of the college.

The actual amount of financial aid awarded to a student is determined primarily by the student's financial need. The type of assistance a student receives is determined by need and qualifications.

Union College participates in the College Scholarship Service (CSS) of the College Entrance Examination Board. Participants in CSS subscribe to the principle that the amount of financial aid granted a student should be based upon financial need. The CSS assists colleges and universities and other agencies in determining the student's need for financial assistance. Entering students seeking financial assistance are required to submit a copy of the Parents' Confidential Statement (PCS) form to the College Scholarship Service, designating Union College of Kentucky, College Code 1825, as one of the recipients by May 15. The PCS form may be obtained from a secondary school or the College Scholarship Service, P.O. Box 176, Princeton, New Jersey 08540; P.O. Box 1501, Berkeley, California 94704; or P.O. Box 881, Evanston, Illinois 60204.

Applying for Financial Aid

Inquiries regarding scholarships, loans, and financial aid should be addressed to the Office of Financial Aid, Union College, Barbourville, Kentucky, 40906.

The only aid for which a foreign student may be eligible is scholarship aid. A foreign student must have completed four consecutive regular semesters at Union College to qualify for scholarship aid and must be approved by the Student Aid, Grants and Scholarship Committee.

1. No student may be approved for financial aid until official admission to Union College has been granted.
2. An application for financial aid must be submitted to the Office of Financial Aid. This form may be obtained by writing the Director of Admissions. This form must be completed and submitted by May 15 preceding the fall term.
3. Parents or guardians of applicants must complete the Parents' Confidential Statement of the College Scholarship Service, Box 176, Princeton, New Jersey 08540, and return it, following the printed instructions on the form, to Princeton, Evanston, or Berkeley, depending on their place of residence. Blank forms are available in most high school guidance offices or from the College Scholarship Service.
4. Students applying for Kentucky State Student Incentive Grants and Kentucky Tuition Grants must submit a Kentucky Financial Aid Form. Forms are available in most high school guidance offices or from Kentucky Higher Education Assistance Authority.

Scholarships

President's Scholarships — Honor Scholarships in an amount up to $700.00 for the academic year are available to select graduates of accredited high schools enrolling in college for the first time. To qualify, students must rank in the top 3% of their graduating class. Evidence of high school rank must accompany the application for financial aid certified by the high school attended. All test scores should also accompany the application for financial assistance.

Honor Scholarship renewals will be based upon a scale of cumulative grade point average as follows:

Cumulative Grade Point Average	Amount of Award
3.0 . . . 3.49	$500.00
3.5 . . . 4.00	$700.00

Alumni Scholarships — The Alumni Association of Union College awards two scholarships annually on the basis of character, need, and evidence of future usefulness. Each scholarship is for $400. Recipients are selected by the Alumni Scholarship Committee.

Appalachian Regional Scholarship — Two friends of Union College have established the Appalachian Regional Scholarship to be awarded to an Appalachian student on the basis of financial need and promise of future usefulness to the region. The stipend is $150 per semester.

The George L. Bagby Scholarship/Loan Fund — The late Mr. George L. Bagby of Woodford County, Kentucky, established a student financial aid endowment totaling $405,000 including accumulated interest, and this supports both scholarships and loans for Kentucky students.

Bank of Harlan Scholarships — A number of scholarships are given annually to qualified students from Harlan County by the Bank of Harlan. The stipends are determined according to financial need and academic excellence.

Barbourville Kiwanis Scholarship — The Kiwanis Club of Barbourville, Kentucky, has supplemented an educational fund originated by Mr. C. F. Heidrick and established a scholarship fund at Union College for promising students from Knox County, Kentucky.

Barbourville United Methodist Church Music Scholarships — Annually The First United Methodist Church of Barbourville, Kentucky, awards four scholarships to music students amounting to $200 for a total of $800. Consideration is given for participation in the music program of the local church.

Henry C. Black Memorial Scholarship — This scholarship is given as a memorial to Mr. Henry C. Black, a graduate of Union College, to a freshman graduating from a high school in Kentucky or Tennessee. The stipend is $250 and is awarded on the basis of need, scholarship, character, and promise of future usefulness.

John A. and Hannah P. Black Memorial Scholarships for Christian Workers — The late Dr. and Mrs. Henry C. Black of Johnson City, Tennessee, endowed a scholarship that provides an an-

nual stipend of $500 for a promising student who plans a life of service in the United Methodist Church.

Dr. and Mrs. James F. Blair Scholarship — Dr. and Mrs. James F. Blair of Barbourville, Kentucky, have endowed a $250 scholarship for students from Knox County, Kentucky. It is awarded annually to a student in the sophomore, junior or senior year on the basis of need, scholarship, character, and promise of future usefulness.

Kathy Brick Memorial Scholarship — Mr. and Mrs. Theodore F. Brick of Dayton, Ohio, provide annually a scholarship of $100 for a student who participates in the competitive swimming program of the College.

The Eulalia Serrano Cabrero Memorial Scholarship — Miss Carmen Cabrero '64, Jacksonville, Florida, has established a scholarship in memory of Eulalia Serrano Cabrero, a 1964 graduate of Union College. The scholarship will pay $100 per year, and is made available to a needy student of minority background interested in social work, preferably a Methodist.

W. S. and Bess Carpenter Scholarship — Mr. and Mrs. W. S. Carpenter of London, Kentucky, provide annually a scholarship for a worthy freshman, preferably from Southeastern Kentucky. The stipend varies with need, but is in the $500-$700 ran.

Dr. and Mrs. Carlo B. Cawood Memorial Scholarship — The late Dr. and Mrs. Carlo B. Cawood of Harlan, Kentucky, have endowed a scholarship to be awarded to a Harlan County student with preference being given to a student from the Harlan United Methodist Church. The Scholarship may be renewed. The stipend is $700 per year.

Mamie D. Chambers Endowment Fund — The late Mamie D. Chambers of Maysville, Ky., has established an endowment fund, the income from which is used to help support grants to needy and deserving students.

Dr. Robert E. Drew Endowment Fund — The Commission of Missions of the Hyde Park Community United Methodist Church, Cincinnati, has established an endowment fund in honor of the Rev. Dr. Robert E. Drew, former associate pastor of the church and an honorary alumnus of Union College. The income from this fund will be used for scholarship grants to foreign students.

Dr. Franklin Duncombe Memorial Fund — Mrs. Helen Duncombe of Haverford, Pa., has established an endowment fund in memory of her late husband, an honorary alumnus of Union College. Income from this fund will be used to finance grants-in-aid under the college loan-grant program for students planning to enter the United Methodist ministry.

Alfred I. DuPont Scholarship Fund — The late Mrs. Alfred I. DuPont of Wilmington, Delaware, established a scholarship endowment, the income from which is used annually to provide one or more scholarships to needy students having high academic potential. Preference in the awarding of these scholarships is given to students from the Appalachian counties of Kentucky and Appalachian region in adjoining states.

E. Nettie Edinger Memorial Scholarship — The late Mr. Joseph Edinger endowed this scholarship in memory of his sister. The scholarship is awarded annually to a deserving and worthy student enrolled at Union College.

Dr. J. Edward Faulkner Memorial Scholarship — Mrs. J. Edward Faulkner of Barbourville, Kentucky, provides an annual scholarship in memory of her late husband. The scholarship is awarded to a junior or senior who plans a life of service in the healing arts, with preference being given to a predental student.

W. Glover Giles Memorial Fund — The late Mr. W. Glover Giles of Louisville, Ky., a trustee of Union College, established an endowment fund by gifts during his lifetime and by a bequest. Income is used to fund Honor Scholarships at Union College.

John O. and Harriet B. Gross Memorial Scholarship — Family and friends of Dr. and Mrs. John Owen Gross have endowed a scholarship in their memory. Dr. Gross was president of Union College during the years 1929-1938. The scholarship is awarded annually to a senior on the basis of scholarship and leadership, with preference being given to students from Northern Kentucky. The stipend and requirements are the same as for "United Methodist Scholarships."

Hubbuch in Kentucky Scholarship — Hubbuch in Kentucky provides an annual scholarship of $400 for a student from Louisville or Jefferson County, Kentucky, who otherwise would be financially unable to attend colllege. It is awarded annually to a freshman on the basis of financial need, scholarship, character, and promise of future usefulness, with special emphasis on students who plan to enter private business activities in Louisville or Jefferson County.

Walter S. and Ida Cole Hudson Scholarship Fund — The late Ida Cole Hudson of Barbourville, an alumna of Union College, through a bequest, has endowed a fund to provide scholarships to students from Knox County, Kentucky. The scholarships are awarded on the basis of need, scholarship, character, and promise of future usefulness.

Irene Hughes Scholarship — Miss Irene Hughes (AB '37; MA '63), Barbourville, Kentucky, provides an annual scholarship of $200 for a freshman girl, a graduate of Knox Central High School, who has been a member of the High School Honors English Class and who exemplifies Christian principles of conduct. The scholarship will be awarded by the Alumni Scholarship Committee.

Professor and Mrs. Millard L. Jordan Scholarship — Professor and Mrs. Millard L. Jordan of Lakewood, Ohio, have established a scholarship fund at Union College to aid worthy Appalachian students. The income from the fund will be awarded as a scholarship to a student each year on the basis of need, scholarship, character, and promise of future usefulness.

Junior College Scholarship — A number of $500 scholarships are available to graduates of junior or community colleges who have earned the A.A. or A.S. degrees with a GPA of at least 2.5 on a 4 point scale. They are renewable for the senior year if the student maintains at least a 2.5 average at Union College.

Junior Study Club Scholarship — The Junior Study Club of Barbourville, Kentucky, provides a $200 scholarship at Unior College to aid worthy students from Knox County, Kentucky. The scholarship is awarded to a girl who graduated from a high school in Knox County who is a junior or senior at Union College. The scholarship recipients are chosen on the basis of need, scholarship, character, and promise of future usefulness.

Jeffrey W. Kronk Memorial Scholarship — Mr. and Mrs. Walter F. Kronk of Huntsburg, Ohio, have endowed a scholarship for a needy, qualified student for Geauga, Lake, or Ashtabula counties in Ohio, or from the Appalachian counties of Southeastern Kentucky. The scholarship is in memory of their son, Jeffrey, who was enrolled at Union College from 1963 through 1967. Should there be no qualified students enrolled from these areas in any given year, the endowment income will be used to support the Lincoln-Civil War Collection at Union College.

W. B. Landrum Memorial Scholarship — Mr. John W. Landrum of Harrodsburg, Kentucky, provides annually a scholarship of $350 in memory of his father for a promising United Methodist ministerial student. The student benefited by this scholarship must exhibit outstanding personal attitudes of religious sincerity, devotion, and earnestness in purpose. Demonstrated failure to exhibit these qualifications to a high degree will result in the forfeiture of the scholarship.

London Laundry Scholarship — The London Laundry & Dry Cleaners, London, Kentucky, has established an annual $300 scholarship to assist a student graduating from a high school in Southeastern Kentucky during his freshman year at Union College. The scholarship is awarded on the basis of scholarship, character, and promise of future usefulness.

Dorothy Lucas Memorial Fund — An endowment fund has been established in memory of Miss Dorothy Lucas, registrar of Union College for many years and beloved friend of students. The income from the fund is used to support various student-aid activities of the college.

Gayle Miles Scholarship — An endowed scholarship has been established by friends and former students of the late Gayle Miles for students from Barbourville High School. This annual stipend will be awarded on the basis of need, scholarship, and promise of future usefulness. The late Miss Miles taught at both Barbourville Elementary School and Union College.

John and Minnie B. McGaffee Trust Fund — Dr. and Mrs. O. J. Wilson of Bowling Green, Kentucky, have established the John and Minnie B. McGaffee Trust Fund for the purpose of providing financial assistance to worthy and needy preministerial students. The income may be used for grants or loans, with preference being given to students from the Appalachian Region of Kentucky.

National United Methodist Scholarships — The Board of Education of The United Methodist Church makes available annually several United Methodist scholarships covering tuition and fees. The awards are made on the basis of character, need, and scholastic ability. Only students having at least a "B" average are eligible.

Emory Evan Peter Memorial Endowment — The late Mrs. Laura P. Dickey of Louisville, Kentucky, established an endowment fund in memory of her brother, Emory Evan Peter. The income from this fund will be used to help finance the college student-aid program.

Presser Foundation Music Scholarship — Union College receives each year from the Presser Foundation, Philadelphia, Pennsylvania, a grant of $400 to be given by the College as a Music Scholarship. Recipients of this scholarship are selected by the President of the College and the Head of the Music Department. The recipient must be majoring in music, and preference will be given to students preparing to become teachers of music.

Donald Rankin Memorial Scholarship — Friends of Donald Rankin, a Union College student killed in Vietnam, have provided a scholarship that pays $100 annually for a young man from Kentucky. Basis for awarding the scholarship is need and the earnest desire for a college education.

E. O. Robinson Mountain Fund Scholarships — The E. O. Robinson Mountain Fund has established an annual scholarship program to assist needy students who reside in the Appalachian Region of Eastern Kentucky. Students receiving these scholarships should give promise of being able to complete their academic work successfully. They should be and remain unmarried while receiving assistance from this scholarship. Qualified persons should apply to the Office of Financial Aid.

Robsion Political Science Scholarship — Honoring Senator John M. Robsion, Sr., and Congressman John M. Robsion, Jr., the Robsion Political Science Scholarship provides a stipend of $750 for the Union College student participating in the Washington Semester Program each year.

Rural Electric Scholarship — The Inter-County Rural Electric Cooperative of Danville, Ky., has established a $100 annual scholarship to assist a Union College student whose parents are members of Inter-County RECC in the counties they serve. This scholarship is awarded on the basis of financial need, character, and academic promise. Preference will be given to freshmen.

Sanders Honor Scholarships — Colonel Harland Sanders of Louisville, Ky., provides annually a number of honor scholarships with the same stipend and on the same terms as the President's honor scholarships. The Sanders Honor Scholarships are limited to students who do not use tobacco and alcoholic beverages.

Lewis Ogden Stiles Endowment Fund — The late Mrs. Lewis Ogden Stiles of Waco, Texas, established this fund to memorialize her late husband, Lewis Ogden Stiles, and his first wife, Pearl Long Stiles, both faithful United Methodists of Irvington, Kentucky. The income from this fund will be used to finance grants-in-aid under the college loan-grant program to United Methodist students planning to enter the ministry of the Kentucky or Louisville Annual Conference.

Sims Scholarship Fund — Reverend and Mrs. Harry C. Sims of West View, Kentucky, have established a scholarship fund at Union College to aid worthy students preparing for the United Methodist ministry. The income from the fund will be awarded as a scholarship to a student each year on the basis of need, scholarship, character, and promise of future usefulness.

Cawood Smith Harlan County Scholarship — Mr. Cawood Smith, Harlan County attorney, has established an endowment for a scholarship to be awarded to the son or daughter of a miner from Harlan County, Kentucky. The recipient shall be a resident of Harlan County and selected upon the basis of need, scholarship, and promise of future usefulness to the coal region. The stipend shall be $500.

Hulbert Taft, Jr., Memorial Scholarship - Mrs. Thomas C. Haydock, Sr., of Cincinnati, Ohio, has provided a scholarship endowment as a memorial to her late husband, Hulbert Taft, Jr. The income from the endowment will be used annually to provide one or more honor scholarships to needy students having high academic potential.

Edward Townsend Memorial Scholarship — Mr. Milton H. Townsend, Vice President for College Relations and Development at Union College, has endowed a scholarship for a worthy

student with preference being given to a history and political science major. The stipend has been established in memory of Mr. Townsend's late father.

Union National Bank Scholarship — The Union National Bank of Barbourville, Kentucky, has established a half-tuition scholarship at Union College to aid worthy students from Knox County, Kentucky. It is awarded to a student graduating from a high school in Knox County, for the freshman year at Union College, on the basis of need, scholarship, character, and promise of future usefulness.

Harry C. Viall Memorial Scholarship — Mrs. Harry C. Viall of Barbourville, Kentucky, has endowed a memorial scholarship for a needy, qualified student with preference going to an individual from Knox County. The annual scholarship is given in memory of her late husband, Harry, who was a prominent local businessman.

Mr. and Mrs. O. H. Viall Memorial Scholarships — The family of Mr. and Mrs. O. H. Viall of Barbourville, Kentucky, have established a memorial scholarship fund at Union to aid worthy students. The number and size of the scholarships vary according to student financial need.

The Robert E. and Ann Viall Endowed Scholarship — Mr. and Mrs. Robert E. Viall of Barbourville, Kentucky, have established an endowed scholarship that provides $500 annually for a worthy student from either Knox or Bell County.

William M. Wilson Memorial Scholarship — Mrs. Eva Oldfield Wilson of Barbourville, Kentucky, has established a scholarship fund in memory of her late husband. The income from the fund will be used to provide an annual stipend of $250 for a promising student preparing to teach in the elementary or secondary schools.

Dr. Henry M. Zimmerman Scholarship — Dr. Henry M. Zimmerman of Pompano Beach, Florida, has established a scholarship endowment, the income from which is used annually to provide a scholarship for needy students of exemplary character who show promise of being able to contribute to the well-being of their country and their fellowman.

Other Scholarships — Other scholarships are often available for students of exceptional academic ability and/or great financial need. Inquiries should be addressed to the Office of Financial Aid.

Assistantships

Several Senior Assistantships are made available annually in the academic divisions. The assistantships are open to students of outstanding scholastic ability who exhibit great promise of future usefulness and who are considering graduate studies with a view of entering college teaching. The duties of the Senior Assistants include occasional classroom lectures, research, remedial work with beginning students, assisting in laboratories, etc. The Assistants are expected to spend a minimum of twelve hours per week on the work assigned. The awards are made by the Scholarship Committee upon recommendation from the Division Chairmen. Senior Assistants receive a stipend of $600 per year.

Resident Grants

A Resident Grant program provides a student's room for an academic year. Grants are given on a basis of academic achievement, participation in campus activities, and need.

Workships

The college seeks to employ as many students as possible in jobs on the campus. Such jobs consist of stenographic work in college offices, science laboratory assistance, in the library, student center, gymnasium, and on the campus grounds. Each workship student is under the supervision of a faculty member or other college employee who makes a monthly time report to the Office of Student Financial Aid where credit on an hourly basis is entered on the student's ac-

count. The Office of Financial Aid can withdraw the workship at any time if student performance or attitude is unsatisfactory.

Work-Study Program

Undergraduate students who need financial assistance to attend college may apply for employment under the College Work-Study Program at Union College. Preference is given to students who have the greatest need after the application of all public and private grants. Students who work part-time while attending school and full-time during vacation periods may earn a large portion of the amount needed for college expenses.

Graduate students who have need and qualify may be considered for the College Work-Study Program. Students must file a Parent's Confidential Statement or a Kentucky financial aid form.

Supplemental Educational Opportunity Grants

The Educational Opportunity Grant Program provides grants of from $200 to $1,000 to students of exceptional financial need who are in academic good standing at Union College. This program, financed by the government, is an "opportunity" program and not a "scholarship" program, and therefore students are eligible if allowed to remain in the institution, if academic promise continues, if it is reasonable to expect graduation, if federal funds continue to be available, and if financial need remains. Those interested may receive applications and further information through the Office of Financial Aid.

Basic Educational Opportunity Grant

The Basic Educational Opportunity Grant Program provides grants to students who attend eligible post-secondary institutions and is based on financial need. The federal government decides the amount of the stipend. Students who attend Union College may qualify for up to $1400. Applications are available in the Office of Financial Aid or at a high school guidance office.

State Student Incentive Grant

The grant program provides grants to students who are residents of the Commonwealth of Kentucky and who will attend eligible post-secondary institutions in the State of Kentucky. Students must be able to show financial need for this assistance as determined by evaluation of his/her Kentucky Financial Aid Form. These forms are available in the Office of Financial Aid or from Kentucky Higher Education Assistance Authority.

Kentucky Tuition Grants

The grant program provides grants to students who are residents of the Commonwealth of Kentucky and who will be attending a private post-secondary institution in the State of Kentucky. Students must demonstrate financial need as determined by evaluation of his/her Kentucky Financial Aid Form.

Loan-Grants

Ministerial Loan-Grant — Ministerial loan-grants amounting to $400 for the academic year are available to students studying for the ministry. To be eligible for this aid the student must have a license to preach, or enroll in the non-credit religion course, Conference Studies, which is designed to prepare candidates for obtaining the license to preach. Renewal of the loan-grant depends on the student's successfully passing this course and obtaining the license to preach before the beginning of the next academic year. Applicants qualified for the loan-grant must sign a note for the amount received each semester. These notes will be cancelled after the individual has entered into the full-time ministry. If the student changes his plans and enters another field of endeavor the notes become due and payable.

Loan-grants amounting to $700 for the academic year are available to United Methodist Local Preachers who agree to serve four years in the Kentucky or Louisville Annual Conference. These notes will be cancelled after the specified service has been fulfilled.

Aid to Children of Ministers — Special consideration for various kinds of financial aid is given to unmarried dependent children of United Methodist ministers. The total amount of assistance will be based on financial need. Applications should be submitted to the Office of Financial Aid and additional information may be secured from this office.

Kentucky United Methodist Church Grants-in-Aid — Any $200 per year grant-in-aid provided by a United Methodist Church in either the Kentucky or Louisville Annual Conference to a member of that Church who is enrolled at Union College as a full-time student will be matched by a $200 per year grant-in-aid provided by Union College.

College Employee Grants — The spouse and unmarried dependent children of full-time employees of Union College may receive a full tuition grant at Union College. A tuition grant at other colleges participating in the Tuition Exchange Program is available to employees' unmarried dependent children.

(1) Full-time employees hired after January 1, 1975, will not be eligible for tuition grants for spouse or children until they have been employed for six months unless they are under annual contract.

(2) Spouses of employees will be limited to nine undergraduate semester hours, or six graduate semester hours during a regular semester and six undergraduate or three graduate in any one summer term. Spouses wishing to take additional work beyond the above mentioned limit will be required to pay for each additional hour at the appropriate hourly rate for tuition.

Loans

George L. Bagby Loan Fund — The late Mr. Bagby has provided the money to establish this loan fund for students who are Kentucky residents. Applications should be made to the Office of Financial Aid.

United Methodist Student Loan Fund — The Board of Education of The United Methodist Church makes available to worthy students at Union College the resources of The United Methodist Student Loan Fund. Apply to the Office of Financial Aid at Union College.

National Direct Student Fund — Union College is participating fully in the student loan-program as established by the 85th Congress in the National Defense Education Act of 1958. Only students with above average records and real financial need should apply for these loans. Special consideration in the selection of loan recipients will be given to students with superior academic background who express a desire to teach in elementary or secondary schools, and to those whose academic background indicates a superior capacity or preparation in science, mathematics, or a modern foreign language. Detailed information may be obtained by writing to the Office of Financial Aid, Union College.

Elizabeth L. Gates Loan Fund — Mrs. Waldo Brown of Knoxville, Tennessee, has established a loan fund in memory of the mother of Mr. John B. Gates, a former student at Union College. The resources of this fund are available to senior male students preparing for the ministry.

Dr. Eugene T. Gray Loan Fund — Dr. Eugene T. Gray, of St. Petersburg, Florida, has established this fund to aid worthy and needy students.

Burton and Verda Hensley Student Loan Fund — Mr. and Mrs. Burton F. Hensley have established a loan fund to aid students at Union College. The resources of the fund are available to worthy and single students.

The Rev. and Mrs. Erwin King Loan Fund — The Rev. and Mrs. Erwin King have established a loan fund to aid worthy ministerial students in the junior or senior year at Union College. To qualify for a loan, the students must possess high qualities of character and scholarship.

Guy H. Williams Loan Fund — Dr. Guy H. Williams of Cleveland, Ohio, has established a loan fund in memory of his wife, Anna Williams. The resources of the fund are available to worthy students who have spent two years at Union College and have a "C" average or better.

Book Loan Fund — The Senior Class of 1957 established a loan fund with the hope that future classes would add to its capitalization. The resources of the fund are available to full-time students on a short-term loan basis for the purchase of required textbooks.

Knox County Chamber of Commerce Student Loan Fund. — Mr. William S. Murphy, former director of development at Union College and first vice president of the Knox County Chamber of Commerce, provided the initial gift to establish this fund. The continued support of the fund was accepted by the Knox County Chamber of Commerce as an expression of appreciation for the contribution of Union College to the educational, economic, social, and religious life of Knox County and vicinity. The Knox County Chamber of Commerce attempts to make annual contributions to this fund, and encourages local citizens to do likewise.

The Charles Henry and Glennora Rominger Krieger Student Loan Fund. — This loan fund, established by the late Glennora R. Krieger of Ft. Thomas, Kentucky, provides loans to worthy and needy students at Union College from the designated Appalachian counties of Eastern Kentucky. The terms of the loans are the same as those of The United Methodist Student Loan Fund.

Other Loan Funds. — Student loans are available from a number of funds not specifically designated for Union College students, but for which Union College students are eligible. Specific information may be obtained from the Office of Financial Aid.

Endowments

The Russell M. Bennett Memorial Professor of Sociology Chair. — This chair was given to Union College by Mrs. Helen Hunt Bennett in the amount of $75,000 for the endowment of this professorship in 1946. An additional $2,000 was given for the equipment of the Business Department.

Andrew and Emma Elizabeth Edinger Memorial Fund. — This fund was established by the late Mr. Joseph Edinger in memory of his mother and father. The fund has been increased by other members of the family and the income designated for use in the maintenance of campus buildings.

Anna E. and John William Harris Memorial Fund. — Dr. J. William Harris has established a lectureship fund containing the sum of $30,000 in memory of his sister, Anna E. Harris, and his father, John William Harris.

Charles and Leona Jennings Memorial Funds. — Dr. Charles M. Jennings of Marietta, Georgia, has established an endowment fund in memory of his parents, Charles and Leona Jennings, the income from which is to be used to provide an annual bonus to the head of the Department of Biology at Union College.

William Jones Endowment Fund. — Mr. William Jones of Barbourville, Kentucky, has established a fund, which may be augmented from time to time, the income from which is designated for use by the School of Music to purchase recordings and musical scores.

Jeffrey Kronk Memorial Endowment. — This endowment, established by the Senior Class of 1967, in memory of Jeffrey Kronk, a member of that class, will assist in purchasing books for Union College's Lincoln-Civil War Collection.

Francis Landrum Memorial Professor of Religion and Philosophy. — The late Mrs. Obed H. Wilson established the Francis Landrum memorial professorship through a bequest of $50,000 in 1927.

Melanie Jean Martin Trust Fund. — Dr. and Mrs. O. J. Wilson of Bowling Green, Kentucky, have established a memorial fund in memory of their granddaughter. The income from the fund is used to purchase library books to support the work of the English Department.

Pearl Sinnett Meyer Memorial Fund. — The Rev. Dr. Jesse I. Meyer has established an endowment fund in memory of his wife, Mrs. Pearl Sinnett Meyer. The income from this fund is designated for the purchase of books for the Union College library.

Willson-Gross Lectures. — The late Dr. and Mrs. James Willson of Floydada, Texas, established a lectureship endowment in memory of Dr. and Mrs. John Owen Gross. The purpose of the lectures is to bring annually to the campus distinguished speakers to discuss vital issues confronting the Christian student.

Colutha J. Taylor Wright Memorial Fund. — The late Mr. J. S. Wright of Whitley City, Kentucky, established an endowment fund in memory of his wife, Mrs. Colutha J. Taylor Wright. The initial sum was $1,000.

Awards

Alpha Psi Omega Award (National Dramatics Honor Fraternity); an Oscar to the male and an Oscar to the female who has contributed most toward drama at Union College, as selected by members of the Fraternity.

Senior Biology Award, by Dr. Theodore R. Davies, to the senior student showing the highest academic excellence in the field of biology.

Blackwell Memorial Award in Political Science, by the late Dr. Robert Lee Blackwell in memory of his mother, Mrs. Victoria Wolfe Blackwell, to the senior majoring in history and/or political science showing the highest academic excellence in the field of political science.

Erwin S. Bradley History and Political Science Award by Sherman Oxendine to the senior with a major in history and minor in political science who has the highest scholastic average in grades earned at Union College.

Kathy Brick Memorial Award, by her parents, Mr. and Mrs. Theodore F. Brick, Dayton, Ohio, to the student showing the highest proficiency in competitive swimming.

The Burke Mathematics Award, in memory of Dr. A. R. Burke, of Binghamton, New York, to the student showing the greatest excellence in the field of mathematics, by the late Mrs. A. R. Burke.

The Chemistry Department Awards, in General Chemistry, Analytical Chemistry, Organic Chemistry, and Physical Chemistry. The award is given to the student who has completed the year course with the best all-around average. Awards are furnished by the Chemistry Department faculty.

The Daniel Drinkard Memorial Award, by students of Union College and friends, through the Alumni Association of Union College, to the runner-up for the Athlete of the Year, the athlete who exemplifies the characteristics of desire, kindness, honesty, and personal integrity, as embodied in his personality and attitude. The award shall be presented each year at the Athletic Banquet and shall be in the form of a plaque kept in the trophy case in the Physical Education Building; a miniature plaque shall be given to the recipient of the award.

Eastern Kentucky Essay Award, by Dr. Kenneth H. Tuggle, trustee of Union College, to the student writing the best essay on Eastern Kentucky history.

Freshman Composition Award, by Dr. and Mrs. William B. Bjornstad, formerly of the faculty of Union College, to the student achieving highest writing excellence in freshman composition courses as determined by the English Department.

Gamma Beta Phi Award, a book, to the full-time student with the highest cumulative average in hours earned at Union College. In case of a tie, the award will go to the student with the greatest number of hours.

Dr. L. A. Geiss Award to the graduating senior majoring in business with the highest cumulative standing in that field.

Mrs. L. A. Geiss Award, to the student majoring in the Department of Home Economics and achieving the highest academic standing in that field for the year.

Governor James D. Black Award, by the late Pitzer D. Black, to the senior with the highest scholastic average for the year.

Iota Sigma Nu Awards to the freshman and the sophomore students with the highest scholastic average in their respective classes for the year.

The H. B. Jones Business Enterprise Award, in memory of H. B. Jones, an attorney in Pineville and Louisville, Kentucky, whose business interests included coal mining, railroading, and construction. The $50 award is given to a student who, in the judgment of the Scholarship Committee of the faculty, has shown initiative and enterprise in the field of business.

Literature Award, by the Tuesday Club of Barbourville, Kentucky, to the senior majoring in English who shows the greatest excellence in the field of literature.

Samuel A. Matthews Memorial Award, a book given by Robert D. Matthews to an upperclass pre-ministerial student whose life and work shows promise of Rev. S. A. Matthews' 50-year ministry in the Southern Illinois Conference of the Methodist Church.

Dr. Paul Muncy Memorial Award, by the Board of Trustees, to the senior premedical student with the highest cumulative academic standing.

The School of Music Faculty Award, to a student majoring in music for interest, initiative, cooperation, musical ability, academics, and service to the department.

Student National Education Association Award, given by the John Owen Gross chapter to the graduating senior showing the greatest excellence in the field of education.

H. H. Owens History Award, by Mrs. H. H. Owens, to the student showing the greatest excellence in the field of history.

The Laws and Esten Parks Award by Mr. S. Laws Parks, former vice president for business affairs of Union College, and Mrs. Parks, presented annually to the preministerial senior with the highest cumulative academic standing.

The Physical Education Faculty Award to the man and woman senior majors with the highest cumulative academic standing.

The Physics Award, by the Physics Faculty to the student showing the greatest excellence in general physics.

President's Award by President Mahlon A. Miller to the senior who has the highest cumulative record in grades earned at Union College.

Howard Rose Most Valuable Player Award—given to the Baseball Team member voted as the outstanding player by the members of the Baseball Team. The award is given by Dr. Robert E. Rose in honor of his father.

Sampson Political Science Award, by the late Governor Flem D. Sampson, to the junior showing the highest academic excellence in the field of political science.

The Hattie Stanberry Ecology Award, in memory of Miss Hattie Stanberry, a graduate of the Union College Academy and faculty member of the college in 1909-1910, who later became Mrs. H. B. Jones. The $50 award is given to the student or organization that, in the judgment of the Scholarship Committee of the faculty, has made a contribution to environmental improvement in the academic year.

The Thomas Storrar Memorial Award-Scholarship. — This annual cash award or scholarship is to be given to a student on Honors' Day who exemplifies the honesty, concern, and personal commitment to the Union College community which was displayed by the late Mr. Tom Storrar, who was employed by the ARA Food Services at Union College. Circle-K Fraternity has initiated this fund.

Katherine V. Sutphen Memorial Award, by the Alumni Association of Union College, to the music student who has used his talents best during the year in serving Union College.

Judge W. W. Tinsley Family Memorial Award, by the late Mrs. Mayo Tinsley Rathfon, to the junior or senior preparing for a legal career showing the greatest promise for future success.

Union College Faculty Award, to the Varsity Letterman with the highest scholastic average for the year.

Beverly P. and Mossie B. Wilson Memorial Award in English, by Dr. and Mrs. O. J. Wilson to the student majoring in English with the highest cumulative grade point standing who has completed three full years of residence at Union College.

Beverly P. and Mossie B. Wilson Trust Fund. — Dr. and Mrs. O. J. Wilson of Bowling Green, Kentucky, have established a memorial fund in memory of Dr. Wilson's mother and father. The first $100 income from the fund shall be used to support the annual "Beverly P. and Mossie B. Wilson Memorial Award in English." Income in excess of $100 shall be used for a revolving loan fund for students majoring in English.

Cecil H. Wilson Award to the junior with the highest scholastic average for the year.

John Henry Wilson Award, given in memory of Mr. John Henry Wilson, former member of Congress from Barbourville, by his granddaughter, Mrs. Guy D. Attkisson, Jr., of St. Petersburg Beach, Florida, to the sophomore from the Fifth Congressional District of Kentucky who has the highest scholastic average for the year.

ACADEMIC REQUIREMENTS

Student Load

The normal undergraduate student load is sixteen semester hours per semester. Students who have an average academic standing may register for a maximum of eighteen semester hours credit per semester. Students who attain a "B" average are permitted to earn up to twenty-one semester hours per semester. Exceptions must be approved by the Division Chairman of the student's major.

The January Interim may be considered as part of the Fall Semester for tuition purposes at the student's option — i.e., the student may restrict his Fall load to a maximum of 14 hours and pay no tuition for the January term. This option is available only to full-time students.

The maximum load in each summer term is generally six semester hours. Students whose cumulative grade point average is "B" or better may request permission from the Division Chairman to take seven hours a term.

Class Attendance

1. Class attendance is required. Each student is responsible for all work from the first day of class and is expected to attend all meetings of the class for which he is registered. This is regarded as a matter of individual student responsibility.
2. All faculty members are expected to keep accurate records of class attendance.
3. Class absences due to circumstances beyond the control of the student will be excused by the teacher involved if request is made within one week of return to the campus. Class work or tests in these classes must be made up.
4. Class work and tests missed due to illness of the student can be made up only when the student presents the teacher with a valid excuse when he returns to class.
5. Class work and tests missed by a student while he is participating in an activity sponsored by Union College may be made up only when the faculty sponsor of such an activity signs the official absence list of students.
6. **A student is not automatically withdrawn when he stops attending a class.** Official withdrawals are made only on forms provided by the Registrar's Office. It is the student's responsibility to complete this form, obtain the signatures needed, and return it to the Registrar's Office.

Examinations and Reports of Marks

Examinations are held at the close of each semester. Tests are held at such times during each semester as the instructors may determine. Final marks are reported by the instructors to the Registrar. A copy of this report is given to the student, and a copy is sent to his parents if the student requests such action. Only final marks become a part of the permanent record.

Credit/Fail System

Students may take two courses per calendar year (June through May) on a Credit/Fail basis. Only two courses may be taken in a single discipline. A student must apply in the Registrar's Office for the Credit Option no later than the Friday following mid-term. When the instructor turns in a letter grade at the end of the semester, a "D" or above will be recorded as "Credit." The option encourages students to take courses they otherwise might not attempt and where they fear the grade might lower their grade point average. The semester hours earned by "Credit" count, but no quality points are earned.

The Marking System and Quality Points

Marks are reported in letters as follows:

A — Represents distinctly superior work, valued at four quality points for each semester hour.

B — Represents above average work, valued at three quality points for each semester hour.

C — Represents average work, valued at two quality points for each semester hour.

Cr — Indicates that a course has been passed satisfactorily.

D — Represents inferior but passing work, valued at one quality point.

F — Indicates failure with 0 credits and 0 quality points for each semester hour.

W — Indicates that a student withdrew during the first 12 weeks of the semester.

I — Indicates that in the opinion of the instructor the student has not been able to complete the required work of the course on time due to unavoidable circumstances.

An "I" received at the end of any semester must be removed before the end of the next semester if the student is enrolled for that term. If the student is not enrolled, the "I" must be removed before the end of the 12-month period following the date on which the "I" was received. Any exceptions to the time limit must be made by agreement of the instructor, division chairman, and registrar. If an "I" is not removed within that time limit, it remains on the permanent record and cannot be made up.

A student who does not take final examinations at the end of a semester will be given temporary registration in the next semester within the time allowed for registration. All final examinations for courses which are prerequisite to courses in which the student may be enrolled the next semester must be taken by the end of the registration period. Failure in any of these prerequisite courses will cancel the student's enrollment in the advanced course.

Quality Point Standing

The quality point standing of a student is determined by dividing the total quality points which he has earned by the total number of semester hours for which he has registered minus the number of hours of Cr and Incomplete on his record.

Honor Students

Union College recognizes excellent scholarship in three ways — the Academic Honors list and graduation with honors. The Semester Honors List is comprised of those students completing at least 12 hours of graded work with a 3.00 standing, no incompletes, and at least a 2.50 overall average.

The President's List is comprised of those students who achieve at least a 3.75 grade average for two consecutive semesters. Each of those semesters of work must have contained at least 12 hours of credit and the summer session may be counted if the minimum hours have been earned.

Appropriate certificates are awarded for both of the academic achievements and graduation honors are noted on the diploma.

Probation

Students falling below the following grade point average will be placed on Academic Probation:

Freshmen	1.70	Juniors	1.90
Sophomores	1.80	Seniors	2.00

Probationary students are closely monitored by the Academic Standing Committee of the college. Continuation of probation for more than two semesters may result in limitations of credit carried, being required to repeat courses in which low grades were earned, loss of Union College financial aid, or suspension from the college.

Suspension

Union College will not accept any credits earned at another institution while a student is under academic or disciplinary suspension from Union College.

Proficiency Examinations

With the consent of a professor, a student may take an examination and if the score is satisfactory, the normal semester hours of credit will be granted. Only credit may be earned by examination; no quality points are earned. Union College is also a regional testing center for the College-Level Examination Program, which provides credit for material mastered through self-study or unaccredited classes (See Special Programs section).

Extension and Correspondence

Any student planning to graduate from Union College must receive permission from the Registrar to register for correspondence or extension courses. Credits cannot be recorded unless prior arrangements are made.

Students enrolled for a full-time program of study shall defer work on all correspondence and extension courses during the term for which they are registered.

Not more than twelve semester hours of correspondence or extension work done in one academic year will be accepted by the College. Not more than one-fourth of the courses in a major may be completed by extension. Not more than thirty-two semester hours of extension and correspondence credit will be accepted toward a degree.

Not more than six semester hours extension or correspondence may be accepted during the senior year. Students with sixty semester hours or fewer at Union may offer six semester hours non-residence in the last thirty-six; students with sixty-one semester hours or more may offer six semester hours out of the last twenty-four.

Failures or quality point deficiencies in any course done in residence cannot be removed by extension or correspondence work.

Graduating seniors must complete any correspondence work needed for graduation at least three weeks before the date of Commencement.

Graduation Requirements

Requirements for Graduation — Bachelor of Arts Degree, Bachelor of Science Degree, and Bachelor of Music Degree (See Music Section).

The candidates must satisfy the following requirements:

1. Minimum of 128 semester hours. Thirty of the last thirty-six must be earned in residence at Union College. Students who have earned as many as sixty-one semester hours at Union College may graduate with only eighteen of the last twenty-four hours earned in residence. At least forty semester hours must be in courses numbered 300 and above.

2. Quality point standing of 2.00 overall and at Union, and in all courses taken in the major or minor fields.
3. Completion of the following General Requirements:
   I. English Composition — 6 hours
   II. Humanities: — 18 semester hours

      Approved courses in art; drama and speech; music; foreign language; religion; philosophy; English language and literature (other than English 355).

   III. Social Science: — 9 semester hours

      History; political science; psychology†; sociology; economics; geography.

   IV. Natural Sciences: — 8 semester hours

      Biology; chemistry; mathematics; physics; general science; environmental science.

   V. a. In II and III no more than six hours may be taken in any one discipline. In IV all eight hours may be taken in one discipline.
      b. Hours taken for a first major may not be counted toward the Group Requirements.
      c. Students taking a 48-semester hour area may count the area hours toward the Group Requirements.

   VI. Courses meeting humanities requirements are marked (H) in the course description section. Those meeting social science requirements are marked (SS) and those meeting science requirements are marked (NS)
4. For the Bachelor of Arts degree, two years of a foreign language offered by the college are required plus other graduation requirements. Students who have had a foreign language in high school should apply to the Head of the Department of Languages in regard to placement.

   Students who have had the equivalent of two years of foreign language at another college should see the Head of the Language Department about the requirements in language for graduation from Union.
5. For the Bachelor of Science degree the student must meet all graduation requirements, including a major or area. A foreign language may or may not be required as determined by the individual discipline.
6. Union College offers a Bachelor of Music degree. See Music Section for these requirements.
7. Completion of either:
   a. A major as determined by the faculty of the individual discipline.

      Majors are offered in Accounting; Applied Music; Biology; Business Administration; Business Education; Community Health; Drama and Speech; Elementary Education; English; Health Education; History; Home Economics (non-vocational); Mathematics; Music Education; Physical Education; Psychology; Recreation; Religion; Secondary Education; Social Work; Special Education; Sociology.

      Minors are offered in Accounting; Art; Biology; Business Administration; Chemistry; Computer Science; Drama and Speech; Economics; English; Environmental Science; Health Education; History; Home Economics (non-vocational); Mathematics; Music; Office Administration; Philosophy; Physics; Psychology; Recreation; Religion; Sociology.

   b. An area, the structure of which is determined by the faculty of the Division in which the area requirements are met.

      Areas are offered in Business, English, Music, Music-Business, and Science.

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†Not acceptable as a Social Science in the Teacher Education Program.

8. At least forty semester hours offered for graduation must be earned in junior and senior courses (300 and above); at least six semester hours 300 and above, earned at Union, must be included in any minor; at least nine semester hours 300 and above, earned at Union, must be included in any twenty-four hour major; at least twelve semester hours 300 and above (evenly distributed in the two fields if this is a combined major), earned at Union, must be included in a thirty hour major; at least eighteen semester hours 300 and above, earned at Union, must be included in an area.
9. At registration each senior must specify the tentative date on which he expects to graduate.
10. Advice in arranging schedules and choosing courses is always given gladly; however, each student is responsible for completing all requirements.

Combined Degrees

The bachelor degrees may be granted to students who have completed three years of work at Union College and one year of work in an accredited professional school, with the following provisions:

1. The work in the professional school must continue the curriculum in which the student has been enrolled at Union College (pre-law, pre-dentistry, pre-medicine, etc.).

2. The student must have completed satisfactorily the minimum requirements for three years of pre-professional work at Union College (ninety-six semester hours with a quality-point standing of at least 2.00) and also the general college requirements for graduation, including the foreign language requirement if a B.A. is desired.

3. The student must have completed satisfactorily the minimum requirements for one year of study at the accredited professional school in which he is enrolled. The number of credits at the end of the four years of study must total at least 128 semester hours.

Degrees With Distinction

Honors in scholarship are recorded on the diplomas of the students earning them, and published in the Commencement program. There are three grades of honors designated respectively: *cum laude, magna cum laude,* and *summa cum laude*. These honors are conferred at graduation upon students who satisfy the following conditions of scholarship:

The honor of *cum laude* is awarded to those students who have earned an average standing of 3.0(B), overall and at Union.

The honor of *magna cum laude* is awarded to those students who have earned an average standing of 3.5 overall and at Union.

The honor of *summa cum laude* is awarded to those students who have earned an average standing of 3.8 overall and at Union.

Students coming from other colleges may receive general honors on completing 61 semester hours of resident study and satisfying the conditions of scholarship prescribed by the faculty, provided they furnish also such evidence of high scholarship in the institution from which they come as may, in the judgment of the faculty, entitle them to become candidates for honors under the regulations.

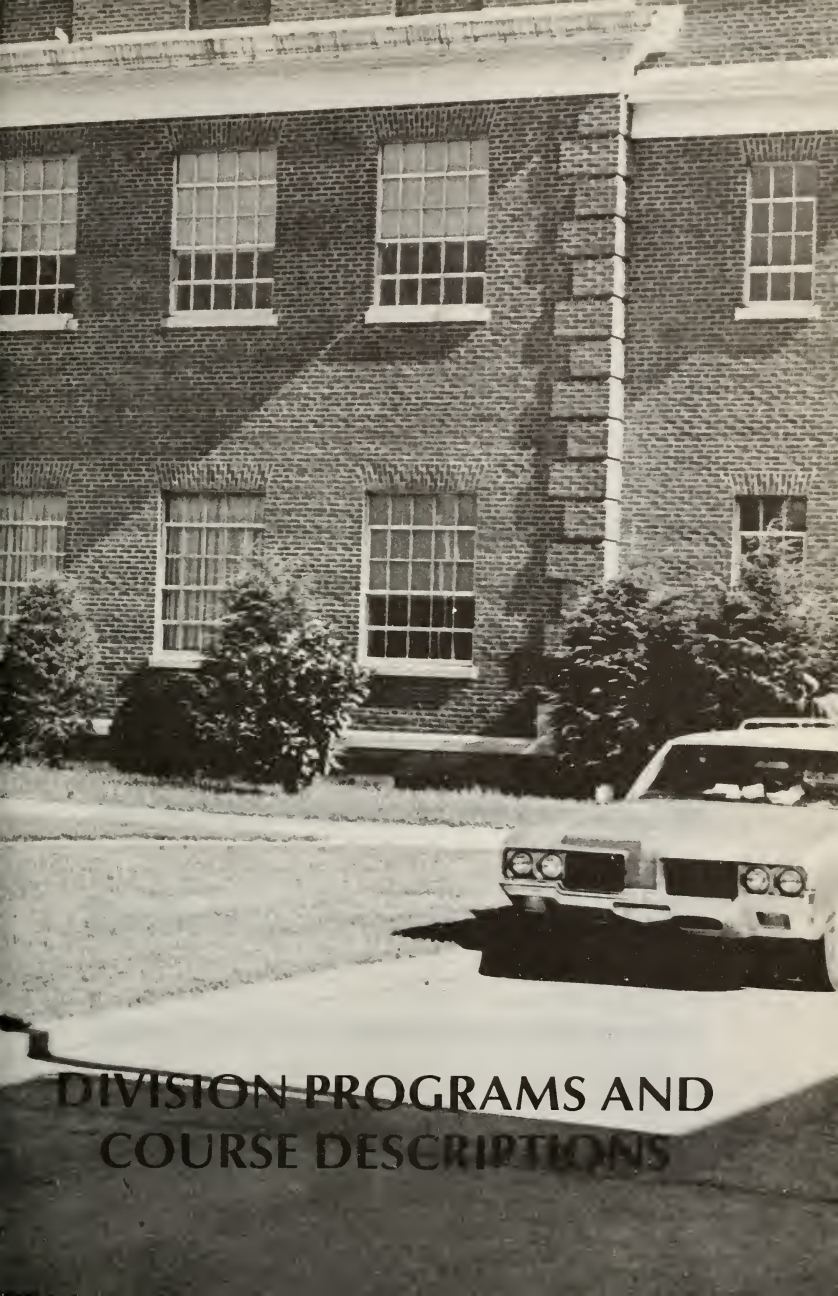
As a reward for excellence in scholarship and to promote diligence in study and encourage high ideals, the honorary scholastic fraternity of Iota Sigma Nu was founded on May 26, 1936. Membership is open upon election to:

(a) All who have met the requirements for graduation with honors.

(b) All students who have at least 74 hours with a 3.2 quality point standing or 100 hours with a 3.0 quality point standing and who have completed a minimum of two years in residence at Union College.

Planned Curriculum

At the beginning of the junior year, a planned curriculum will be developed by the Division Chairman at the student's request. This is a binding agreement between the college and student. Once the curriculum has been completed only changes approved by the Registrar are binding on the college.



DIVISION PROGRAMS AND COURSE DESCRIPTIONS

MAJORS AND DEGREES

A college major is actually a means to an end — the means by which a student prepares for a future career, entrance into graduate school, or some change in his life style. Union College offers a wide variety of majors and minors, as part of the Bachelor's degree and a number of certificate and 2-year Associate degree programs for those not needing a full 4-year degree.

DEGREE AREA	BA/BS Major	BA/BS Minor	Assoc. Degree	Cert.
Accounting	•	•	•	
Business Administration	•	•		
Business Education	•			
Office Administration	•	•	•	•
Computer Science		•	•	
Medical Secretarial			•	
Office Adm./Home Econ.			•	
Music/Business	•			
Economics		•		
Elementary Education	•		•	
Secondary Education	•			
Special Education — LBD	•			
Vocational Education			•	
Home Economics	•	•		
Office Ad./Home Econ.			•	
Health Education	•	•		
Community Health	•			
Physical Education	•			
Recreation	•	•	•	
Drama and Speech	•	•		
Music Education (BM)	•			
Applied Music (BM)	•	•		
Music/Business	•			
English	•	•		
Religion	•	•		
Christian Education	•			
Philosophy		•		
Psychology	•	•		
Sociology	•	•		
Social Work	•	•		
Pre-Law	•			
History	•	•		
Appalachian Semester				•

DEGREE AREA	BA/BS Major	BA/BS Minor	Assoc. Degree	Cert.
Biology	•	•		
Science Education	•			
Pre-Medicine	•			
Pre-Engineering	•			
Pre-Optometry	•			
Pre-Pharmacy	•			
Pre-Physical Therapy	•			
Pre-Veterinary Medicine	•			
Pre-Dentistry	•			
Medical Technology	•			
Environmental Science		•		
Chemistry		•		
Mathematics	•	•		
Physics		•		
Radiologic Technology			•	

Undecided Majors

Students who have not made a vocational or professional choice will be assigned an advisor in the Career Counseling Office. Those who plan a general program leading to a professional degree program at a university not requiring a bachelor's degree for admissions should confer carefully with their academic advisors and schedule that program from the general education courses of the college.

Course Numbering System

Courses numbered 100 or 200 are intended primarily for lower division students and 300 and 400 level courses are generally reserved for upperclassmen. Freshmen or Sophomores desiring to enter 300 or 400 level courses should confer with the division chairman involved for permission to enroll. 500 level courses are restricted to graduate students.

Courses with hyphenated numbers (101-102) are used when the first semester is prerequisite to the second.

Interdepartmental Numbers

Some special numbers are reserved for specific types of courses or studies. They may be used in any department although they are not shown in the following pages under the specific listings.

001-099	Non-credit special interest courses.
281, 481, 581	"Special Topics" courses — classes developed on a one-time, or experimental basis, or a special innovative class.
282, 482, 582	Special workshops, credit or non-credit.
283, 483, 583	Television courses through Kentucky Educational Television Network
284, 484	January interim courses not listed under a regular catalog number
285, 485	Experiential Education — internships, cooperative work experience, and vocational work experience.
287, 487	Field Practicums in specialized areas.
495, 595	Independent Study — individual research on approved topics not found in traditional courses. May be repeated on different topics.

Special Notations

Each course description indicates the semester the course will be offered — (F) for Fall Semester, (S) for Spring Semester, and (Sum) for Summer Session.

Many regular year courses are offered in summer sessions but are not guaranteed offerings.

Courses indicated as being offered in "Even Years Only" are offered on an alternate year basis in academic years *beginning* with even numbers, as 1978-79 — "Odd Years Only" courses are offered on an alternate year basis in academic years *beginning* with odd numbers, as 1979-80.

Courses marked (H) meet general college requirements in humanities; those marked (NS) meet the requirements in natural science; and those marked (SS) meet the requirements in Social Science.

Students should consult regularly with their advisor to insure proper progress toward their degree. During the Junior year, a final planned curriculum is prepared which constitutes a contract for the courses remaining to be completed in order to earn the degree. It is the student's responsibility to initiate the process of developing the planned curriculum.

Division of Applied Sciences

Frances Patridge, *Chairman*
Department of Business and Economics — Department of Education
Department of Health, Physical Education, & Recreation

1. DEPARTMENT OF BUSINESS AND ECONOMICS

Mohamed Dabbagh, *Department Head*
Accounting — Business Administration — Business Education
Computer Science — Economics — Office Administration

BACHELOR OF SCIENCE DEGREES IN BUSINESS

In addition to the general college requirements, all candidates for the Bachelor's degree must complete the following courses and one of the major fields listed below:

Common Courses Required of All Candidates

		Semester Hours
B.Ad. 271	Principles of Marketing	3
B.Ad. 351	Principles of Finance†	3
B.Ad. 352	Principles of Management	3
B.Ad. 411	Business Law	3
Acct. 171-172	Principles of Accounting	6
Comp. Sci. 131	Intro. to Data Processing	3
Econ. 153-154	Principles of Economics	6
		27

Accounting Major

Acct. 341-342	Intermediate Accounting	6
Acct. 421	Cost Accounting	3
Acct. 441	Tax Accounting	3
B.Ad. 412	Business Law	3
	Choice of Computer Language	3
Off. Ad. 261	Office Machines	2
	Accounting Electives	6
		26

Business Administration Major

B.Ad. 372	Personnel Management	3
B.Ad. 401	Statistics	3
B.Ad. 451	Business Policy	3
Off. Ad. 302	Business Communication	3
	Choice of Computer Language	3
	Electives in Bus. & Economics	12
		27

†waived for Business Education majors.

Business Education Major (See Education Dept. for certification requirements)

		Semester Hours
Acct. 321	Payroll Accounting	2
B.Ed. 361	Methods of Teaching Bus. Subjects	3
B.Ad. 152 or Off. Ad. 301	Business Mathematics or Business English	3
Off. Ad. 112	Typewriting	3
Off. Ad. 121-122	Elem. & Inter. Shorthand	6
Off. Ad. 302	Business Communication	3
Off. Ad. 331	Office Practice	4
		24

Office Administration Major

		Semester Hours
B.Ad. 152	Business Mathematics	3
Off. Ad. 112	Typewriting	3
Off. Ad. 211	Advanced Typewriting	3
Off. Ad. 121-122	Elem. & Inter. Shorthand	6
Off. Ad. 261	Office Machines	2
Off. Ad. 301	Business English	3
Off. Ad. 302	Business Communication	3
Off. Ad. 361	Office Management	3
		26

Business and Music Major*

B.Ad. 272	Salesmanship	3
Off. Ad. 302	Business Communication	3
	Upper division Business elective	3
	Field Placement	3-10
Mus. 161-162	Foundations of Music	8
Mus. 261-262	Harmony	6
Mus. 111-412	Applied Music	16
Mus. 322	Music History	3
Mus. 171-176	String, piano, woodwind, or brass class (choice of any 3)	3
		48-55

*The college general requirements may be reduced by 6 hours in Humanities and 6 hours in Social Science because of courses required in the major. Because of the unique combination of music and business courses required on the lower division level, from 4 to 19 hours of upper division courses must be taken from electives and general requirements to meet the college requirement of 40 hours of upper division work.

ASSOCIATE OF APPLIED SCIENCE DEGREES IN BUSINESS

The following two-year programs lead to the award of the A.A.S. degrees in the majors indicated. Union College provides a "career ladder" approach to learning in that students who complete these degrees may immediately apply the credits earned on the two-year degree toward a Bachelor's degree, or return to college later with the guarantee that the credits previously earned will apply toward the 4-year degree.

Common Courses Required of All Candidates

		Semester Hours
Eng. 111-112 or Eng. 110-111	English Composition	6
Acct. 171	Principles of Accounting	3
	Humanities General Requirement	3
Econ. 153	Principles of Economics	3
Bus. Ad. 152	Business Mathematics	3
		18

Accounting Major (AAS)

		Semester Hours
Acct. 172	Principles of Accounting	3
Comp. Sci. 131	Intro. to Data Processing	3
Off. Ad. 261	Office Machines	2
B.Ad. 411	Business Law	3
Econ. 154	Principles of Economics	3
	Accounting Electives	8
	Nat. Science or Math General Req.	4
	Humanities or Soc. Sci. Gen. Req.	6
	Business Electives	6
	Free Electives	8
		46

Computer Science Major (AAS)

		Semester Hours
Acct. 172	Principles of Accounting	3
Comp. Sci. 231	Intro. to Data Processing	3
Comp. Sci. 233	FORTRAN Programming	3
Comp. Sci. 235	RPG Programming	3
Comp. Sci. 237	COBOL Programming	3
Comp. Sci. 331	Systems Analysis	3
Comp. Sci. 333	Survey of Computer Systems	3
Math. 111	Algebra & Trigonometry	4
Bus. Ad. 401	Statistics	3
Econ. 154	Principles of Economics	3
	Humanities or Soc. Sci. Gen. Req.	3
	Internship and/or Free Electives	10
	Accounting Elective	2-3
		46-47

Office Administration (AAS)

		Semester Hours
Off. Ad. 111-112	Typewriting	6
Off. Ad. 121-122	Elem. & Inter. Shorthand	6
Off. Ad. 261	Office Machines	2
Off. Ad. 301	Business English	3
Off. Ad. 302	Business Communication	3
Off. Ad. 331	Office Practice	4
	Natural Science General Requirement	4
	Humanities or Soc. Sci. Gen. Req.	3
	Business Elective	3
	Free Electives	12
		46

Medical Secretarial Administration (AAS)

		Semester Hours
Off. Ad. 111-112	Typewriting	6
Off. Ad. 121-122	Elem. & Inter. Shorthand	6
Off. Ad. 261	Office Machines	2
Off. Ad. 301	Business English	3
Off. Ad. 302	Business Communication	3
Off. Ad. 331	Office Practice	4
Biol. 151	Medical Terminology	2
Health 340	Anatomy & Physiology	4
Health 131	First Aid & Safety	3
Health 270	Personal & Community Health	3
	Free Electives	10
		46

Home Economics — Office Administration (AAS)

(See Home Economics section of Department of Education for requirements)

DIPLOMA IN OFFICE ADMINISTRATION (One Year Program)

		Semester Hours
Eng. 110 or 111	English Composition	3
Off. Ad. 111-112	Typewriting	6
Off. Ad. 121-122	Elem. & Inter. Shorthand	6
B.Ad. 151	Introduction to Business	3
Off. Ad. 261	Office Machines	2
Off. Ad. 301	Business English	
or		3
Off. Ad. 302	Business Communications	
Off. Ad. 331	Office Practice	4
Acct. 171	Principles of Accounting	3
	Elective	2
		32

MINORS AVAILABLE TO ALL STUDENTS

Accounting

Eighteen semester hours in accounting and three hours in Business Law.

Business Administration

Accounting 171-172, Business Administration 352 and 411, Computer Science 131, and Economics 153, and three hours Business elective.

Computer Science

Accounting 171-172 and 15 hours of computer science courses.

Economics

Twenty-one hours chosen from Economics courses or Business Administration 351, 401, Sociology 251, History 241.

Office Administration

Twenty-one hours including Office Administration 112, 122, 261, 301, 331, and six hours elective Office Administration.

ACCOUNTING

Accounting 171-172. Principles of Accounting. **(F,S) (3-3)**
Procedures in journalizing, posting, financial statements, adjusting and closing entries, controlling accounts, and the voucher system.

Accounting 321. Payroll Accounting. **(S) (2)**
The Social Security Act and other laws relating to the payment of wages and salaries, the preparation of State and Federal tax returns, and the use of data processing in payroll accounting. Acct. 171 recommended.

Accounting 341-342. Intermediate Accounting. **(F,S) (3-3)**
Financial statements, working capital, investments, plant and equipment, stockholders' equity, analytical processes. *Prerequisite:* Accounting 172.

Accounting 421. Cost Accounting. **(S) (3)**
Methods of assembling cost data for materials, labor, and overhead consumed in a manufacturing enterprise. *Prerequisite:* Accounting 341.

Accounting 422. Auditing. **(F) (3)**
Verification, analysis and interpretation of accounting records. *Prerequisite:* Accounting 341.

Accounting 441. Tax Accounting. **(S) (3)**
Problems of accounting for all types of federal, state, and local taxes. *Prerequisite:* Acct. 172.

Accounting 442. Advanced Accounting. **(F) (3)**
Accounting for partnerships, joint ventures, installment sales, consignments, home office and branch units, consolidated income statements, balance sheets, and surplus statements. *Prerequisite:* Accounting 342.

BUSINESS ADMINISTRATION

Business Administration 151. Introduction to Business. **(F) (3)**
Forms of business ownership, marketing, personnel management, finance, and government regulations.

Business Administration 152. Business Mathematics. **(S) (3)**
Fundamental processes involving percentage, interest, discount, payroll, taxes, and financial statements.

Business Administration 271. Principles of Marketing. **(F) (3)**
Study of the movement of goods from producer to consumer and an examination of the functions of the marketing process, marketing institutions, channels of distribution, legal aspects, and policy consideration.

Business Administration 272. Salesmanship. **(S) (3)**
The interpretation of sales techniques and methods, prospective customers, interviews, sales presentation, demonstration, closing the sale.

Business Administration 351. Principles of Finance. **(F) (3)**
Basic principles of finance including monetary and credit systems, the demand for funds in the capital market, factors affecting the supply of funds, and monetary and credit policies. *Prerequisites:* Acctg. 151 and Econ. 154.

Business Administration 352. Principles of Management. **(F) (3)**
The development of organization plans and policies, development of industrial relations, management operation with emphasis on skills and techniques of leadership.

Business Administration 371. Insurance. **(S) (3)**
Insurance contracts and the fields of insurance including fire, marine, casualty, social, disability, life and property. (Odd years only).

Business Administration 372. Personnel Management. **(S) (3)**
Supervision of employees, policies relating to effective utilization of human resources in business concerns. *Prerequisite:* B.Ad. 352.

Business Administration 401. Statistics. **(F) (3)**
A study of the mathematics involved in statistical analysis and the effective use of statistical data in decision making.

Business Administration 404. Investments **(S) (3)**
Public and Corporate securities, security markets, investment policies and tax problems. (Even years only)

Business Administration 411-412. Business Law. **(F-S) (3-3)**
Laws dealing with contracts, agency, employment, bailment, transportation, real and personal property, leases, and bankruptcy.

Business Administration 451. Business Policy. **(S) (3)**
Analysis of management problems, formulation of alternative courses of action, determination of policy decisions. *Prerequisite:* B.Ad. 352

BUSINESS EDUCATION

Business Education 361. Methods of Teaching Business Subjects. **(on demand) (3)**
Methods, materials, and techniques used in the teaching of bookkeeping, typewriting, shorthand, and general business subjects.

COMPUTER SCIENCE

Computer Science 131. Introduction to Data Processing. **(F) (3)**
Survey of basic computer concepts, hardware, and operations; introduction of basic programming concepts and documentation standards used in various programming.

Computer Science 233. FORTRAN Programming. **(F) (3)**
A study of the FORTRAN IV programming language on the NCR Century 50 computer including evaluation, flowcharting, and solution of problems that are adaptable to business and/or science.

Computer Science 235. RPG Programming. **(S) (3)**
A study of the RPG programming language on the NCR Century 50 computer oriented toward problems and reports related to business applications.

Computer Science 237. COBOL Programming. **(S) (3)**
A study of COBOL, a high level programming language which is adaptable to most business applications of any magnitude. (Even years only).

Computer Science 331. Systems Analysis. **(F) (3)**
A study in the analysis and organization of a system which can be adapted to a complete practical application. Students must be able to utilize concepts learned in the related computer science courses to accomplish this. (Even years only).

Computer Science 333. Survey of Computer Systems. **(on demand) (3)**
A comparative study of the various computer systems available, such as IBM, Honeywell, Univac, NCR, Mini Computer.

ECONOMICS

Economics 153-154. Principles of Economics. **(F-S) (3-3) (SS)**
Elementary economic theory of prices, national income, production, and employment.

Economics 251. Environmental Economics. **(S) (3)**
Societal choice in the use of scarce resources is related to ecosystem survival, environmental quality, and human welfare. *Prerequisite:* Environmental Studies 100.

Economics 351. Intermediate Price Theory. **(F) (3) (SS)**
Deals with the principle of production under perfect competition, monopoly, duopoly, oligopoly, cartel, and monopolistic competition. *Prerequisite:* Economics 154.

Economics 352. National Income Analysis. **(S) (3) (SS)**
Deals with the formation of national income, consumption, investment, government spending, the U.S. export and import, and stabilization policy in the U.S. *Prerequisite:* Economics 153.

Economics 353. Consumer Economics. **(S) (3)**
The role of the consumer in handling his money. (Odd years only)

Economics 363. Money and Banking. **(F) (3)**
National banking system, nature and functions of money, the importance of credit, bank deposits, and loans. *Prerequisite:* Economics 153.

Economics 403. Industrial Relations & Collective Bargaining. **(F) (3)**
The labor market, wage and labor problems and theories, development of labor unions, wage and labor policies. *Prerequisite:* Economics 153 and 154. (Even years only)

The following courses may be counted as Economics:
History 241. American Economic History.
Sociology 251. Current Socio-Economic Problems.
B.Ad. 401. Statistics.

OFFICE ADMINISTRATION

Office Administration 111-112. Typewriting. **(F-S) (3-3)**
A student with one or more high school units in typewriting cannot take Office Administration 111 for credit.

Office Administration 121. Elementary Shorthand. **(F) (3)**
Principles of Gregg Shorthand, Diamond Jubilee Series. A student with one or more high school units in shorthand cannot take Office Administration 121 for credit. *Prerequisite:* Office Administration 111 or concurrent with Office Administration 111.

Office Administration 122. Intermediate Shorthand. **(S) (3)**
Continuation of Office Administration 121.

Office Administration 211. Advanced Typewriting. **(S) (3)**
Applying typewriting skill to practical on-the-job activities. *Prerequisite:* Office Administration 112 or equivalent.

Office Administration 221. Dictation and Transcription. **(S) (3)**
Emphasis placed on speed in taking dictation and in transcribing notes. *Prerequisite:* Office Administration 122 or equivalent.

Office Administration 261. Office Machines. **(F) (2)**
Skill building in the use of common office machines.

Office Administration 301. Business English. **(F) (3)**
Using words effectively, language structure, punctuation.

Office Administration 302. Business Communication. **(S) (3)**
The methods and techniques of organizing business letters, memoranda, and reports with intensive writing practice, in-class analysis, and student evaluation. *Prerequisite:* O.Ad. 301 or Eng. 111

Office Administration 331. Office Practice. **(S) (4)**
The development of office proficiency. Laboratory required. *Prerequisite:* O.Ad. 112

Office Administration 361. Office Management. **(S) (3)**
Office building, equipment, personnel supervision, control of office activities. (Even years only).

2. DEPARTMENT OF EDUCATION**

Arthur H. Hafner, *Department Head*

Elementary Education — Secondary Education — Special Education — Home Economics

The undergraduate programs in the Department of Education have as their primary objective the preparation of superior teachers for public and private schools, both elementary and secondary.

At Union College the education of prospective teachers is the responsibility of the College as a whole, not the Department of Education alone.

The teacher education programs described in the following pages prepares the student to receive a baccalaureate degree and, upon recommendation of the College, a Kentucky teachers certificate. A student who wishes to teach in a state other than Kentucky should determine certification requirements in that state (usually quite similar to Kentucky's), and plan his program accordingly. Information on certification requirements in all states is available in the Education Department office and in the Career Planning and Placement Office.

Requirements for Admission to the Teacher Education Program

1. Formal written application, preferably in the second semester of the sophomore year, or during the semester in which the student takes the first professional education course. Application forms may be obtained in the Department of Education office.
2. An over-all grade point average of at least 2.25, based on a 4-point scale.
3. Evidence of personal and social fitness.
4. Evidence of good physical and mental health.
5. Recommendation of instructors in the student's teaching fields.
6. Recommendation of the appropriate level of the Department of Education.
7. Acceptance by the Teacher Education Committee.

Requirements for Admission to Student Teaching

1. Formal written application. Applications for student teaching during the spring semester must be submitted by September 15. Applications for student teaching during the fall semester will be approved only when warranted by unusual circumstances, and must be made by April 1. Application forms may be obtained in the Department of Education office.
2. Grade point average of at least 2.25 in all courses completed, in courses listed under Professional Preparation, and in courses in each teaching field.
3. Recommendation of departments in which teaching fields are sought.
4. Recommendation by the appropriate level in the Department of Education.
5. Satisfactory completion of Education 432 (elementary) or Education 452 (secondary).
6. Acceptance by the Teacher Education Committee.

ELEMENTARY EDUCATION CURRICULUM

1. General Education
   - A. English Composition ..... 6 semester hours
   - *B. Humanities ..... 18 semester hours

**Minor changes in course allocations may be necessitated by new state certification requirements.

Three semester hours must be in Literature; remaining hours to be taken from the following: Art; Drama and Speech; Music; Foreign Languages; Religion; Philosophy; English Language and Literature (other than English 355).

C. Mathematics and Natural Science ..... 12 semester hours

Biology, Chemistry, Mathematics, Physics, General Science. At least 3 semester hours shall be in the field of Physical Science and at least 3 semester hours shall be in the field of Biological Science.

*D. Social Science ..... 12 semester hours

History; Economics; Political Science; Sociology, Geography.

E. Health and Physical Education in Elementary School ..... 3 semester hours

II. General Requirements

A. Social Science ..... 3 semester hours
B. Introduction to Psychology ..... 3 semester hours
C. Children's Literature ..... 3 semester hours
D. Structure of the Number Systems ..... 6 semester hours
E. Elementary School Art ..... 3 semester hours
F. Elementary School Music ..... 3 semester hours

III. Professional Preparation

A. Education 241 — Introduction to Education ..... 3 semester hours
B. Education 341 — Methods of Teaching Math ..... 3 semester hours
C. Education 351 — Human Growth & Development ..... 3 semester hours
D. Psychology 361 — Psychology of Learning ..... 3 semester hours
E. Education 361 — Reading in The Primary Grades ..... 3 semester hours
F. Education 362 — Reading in The Intermediate Grades ..... 3 semester hours
G. Education 432 — Methods and Materials in the Elementary School .... 4 semester hours
H. Education 433, 434 — Supervised Student Teaching in the Elementary School ..... 10 semester hours
I. Special Education 365 — Foundations of Education for the Exceptional Child ..... semester hours

*No more than 6 semester hours in any one discipline.

SECONDARY EDUCATION CURRICULUM

1. General Education

A. English Composition ..... 6 semester hours

*B. Humanities ..... 18 semester hours

Three semester hours must be in Literature; remaining hours to be taken from the following: Art; Drama and Speech; Music; Foreign Languages; Religion; Philosophy; English Language and Literature (other than English 355).

C. Mathematics and Natural Science ..... 12 semester hours

Biology, Chemistry, Mathematics, Physics, General Science. At least 3 semester hours shall be in the field of Physical Science and at least 3 semester hours shall be in the field of Biological Science.

*D. Social Science ..... 12 semester hours

History, Economics, Political Science, Sociology, Geography

E. Personal and Community Health ..... 3 semester hours
F. Introduction to Psychology ..... 3 semester hours

II. General Requirements for Students Preparing for Teaching in Secondary School.

Majors, Minors, and Areas of Concentration**
An Area of Concentration ..... 48 semester hours

One Major ..... 30 semester hours
One Major of 30 semester hours and one Minor of 21 semester hours ..... 51 semester hours

Majors in subject combinations shall require 36 semester hours credit. In a combination of subjects for majors, not less than 12 semester hours shall be in each subject within the major. Method courses shall be in addition to those in the majors and minors. Education 362 is required of students preparing to teach English.

III. Professional Preparation for Secondary Teacher

A. Education 241 — Introduction to Education ..... 3 semester hours
B. Education 351 — Human Growth & Development ..... 3 semester hours
C. Psychology 361 — Psychology of Learning ..... 3 semester hours
D. Education 452 — Methods and Materials in the Secondary School ..... 4 semester hours
E. Education 453, 454 — Supervised Student Teaching in Secondary Schools ..... 10 semester hours
F. Special Education 365 — Foundations of Education for the Exceptional Child ..... semester hours

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*No more than 6 semester hours in any one discipline.
**Choose one of the three (3) options listed.

ASSOCIATE OF APPLIED SCIENCE IN VOCATIONAL EDUCATION (for vocational teachers)

	Credit hours
English 110 and 111 (or 111 and 112) Freshman Composition	6
Psychology 111 General Psychology	3
Speech 131 Fundamentals of Speech	3
Natural Science Core Requirement	4
Humanities Core Requirement	3
Social Science Core Requirement	3
Experience Credit for vocational certification	6-9
Vocational Education Block (from state approved school) (transfer)	24
Free electives	9-12
	64

ASSOCIATE OF APPLIED SCIENCE FOR GRADUATES OF STATE VOCATIONAL SCHOOLS

	Credit Hours
Credit for 22-month post high school vocational program	48
English 110 or 111 English Composition	3
Social Science Core Requirement	3
Natural Science Core Requirement	3
Humanities Core Requirement	3
Free Elective	3
	64

	Credit Hours
Credit for 11-month post high school vocational program	24
English 110 and 111 English Composition	3
Social Science Core Requirement	3
Natural Science Core Requirement	4
Humanities Core Requirement	3
Elective Credits (planned curriculum developed & followed)	27
	64

A "C" (2.00) average is required and a minimum of 15 hours in residence.

For the vocational student wishing to continue his/her education to the Bachelor's degree level, a planned course of study (contract) will be developed so that the degree can be earned with an additional 64 hours of specified credit beyond the A.A.S. degree.

Graduates of the 11-month vocational programs should plan additional hours of general education credits within their electives to better prepare for the 4-year degree.

ASSOCIATE OF APPLIED SCIENCE IN EDUCATION*

		Credit Hours
English 110	(or 111 & 112) Freshman Composition	6
Natural Science	(Environmental Science 100 recommended)	4
Sociology 131	Introduction to Sociology	
or		3
Sociology 421	Rural & Urban Sociology	
Psychology 111	Introduction to Psychology	3
Humanities Requirement (speech or theatre recommended)		3
Art 271	Elementary School Art	3
Music 373	Elementary School Music	3
Education 241	Introduction to Education	3
Education 351	Human Growth and Development	3
Education 440	Early Childhood Education	3
English 355	Survey of Children's Literature	3
Health 270	Personal and Community Health	3
Social Work 171	Introduction to Social Services	3
Home Econ. 361	Principles of Nutrition	3
Special Ed. 365	Foundations of Ed. for Exceptional Child	3
	Supervised Experience in Early Child. Ed.	3
Electives	(Recommended from Appalachian Semester, Kentucky History, Typing, Intro. to Recreation Arts & Crafts, & Structure of Number Systems)	12
		64

*Designed for those who work in day care centers and agencies dealing with small children where teacher certification is not required.

EDUCATION

Education 241. Introduction to Education. **(F,S) (3)**

The purpose and function of education. Classroom and school organization, guidance services, library services, evaluation, reporting to parents and other phases of the school program.

Education 341. Methods of Teaching Mathematics in Elementary School. **(F) (3)**

Modern methods and materials for teaching mathematics in the elementary school. *Prerequisite:* Mathematics 203 or equivalent.

Education 351. Human Growth and Development. **(F) (3)**
Basic concepts for understanding the development of the child and the adolescent. Includes observation.

Education 361. Reading in the Primary Grades. **(F) (3)**
Methods and materials for the teaching of reading in the primary grades including observations, micro-teaching demonstrations, making of lesson plans, and evaluation of a child's readiness.

Education 362. Reading in the Intermediate Grades. **(S) (3)**
Emphasis on study skills, individualized programs and reading in the content subjects.

Education 401. Introduction to Counseling and Guidance. **(S) (3)**
Educational, sociological, and psychological foundations of counseling and guidance in schools, colleges and related service oriented agencies. Essential counseling and guidance services, policies, practice and procedures.

Education 432. Methods and Materials in the Elementary School. **(F) (4)**
Emphasis on language arts, social studies, and science; directed observation; *Prerequisites:* Education 241, 341, 351, 361, and 362; 90 semester hours college credit; quality point standing of 2.25 overall and at Union College; one semester residence; and admission to the Teacher Education Program at Union College. No late registration.

Education 433, 434. Supervised Student Teaching in the Elementary School. **(S) (5-5)**
Laboratory experiences in working with children, teachers, and others in school and community. Supervision by a qualified classroom teacher for a period of 10 weeks. Transportation and meals paid by the students. Application to be made one semester in advance. *Prerequisite:* See previous section.

Education 435. Laboratory Experiences in Education. **(On Demand) (5)**
A substitute for student teaching for elementary majors. Considers current problems and trends in teaching with laboratory periods for construction of classroom materials. *Prerequisites:* One year of successful classroom teaching experience; Education 241 and 432; scholastic standing of 2.25 or above; completion of 90 semester hours; approval by the Committee on Teacher Education; and one semester residence at Union College.

Education 436. Laboratory Experience in Education. **(On Demand) (5)**
For elementary majors with same course content and prerequisites as 435 except that four or more years of successful classroom teaching experience must have been completed.

Education 440. Intro. to Early Childhood Education **(Sum) (3)**
Survey of the physical, emotional, mental, and psychological development of the child under six, and the role of the kindergarten teachers in working with such a child.

Education 441. Measurement and Evaluation. **(S) (3)**
Instruments and techniques for evaluating abilities, aptitudes, personality traits, and interests will be examined and teacher-made evaluative instruments will be given special emphasis. Application of test results to vocational and educational guidance is to be stressed.

Education 452. Methods and Materials in the Secondary School. **(F) (4)**
Current teaching methods, materials, and innovations in the secondary school with directed observations. *Prerequisites:* Education 241 and 351; 90 semester hours of college credit; quality point standing of 2.25 overall and at Union College; one semester of residence; and admission to the Teacher Education Program at Union College. In addition, a quality point standing of 2.25 or above is required in areas of concentration, major, and minors. No late registration.

Education 453, 454. Supervised Student Teaching in the Secondary School. **(F,S) (5-5)**
Under the direction of an experienced teacher, the student teacher directs the usual teaching activities in the classroom for 10 weeks in local public schools. Application should be made one full semester in advance of the time the teaching is to be done. *Prerequisite:* See previous section.

Education 455. Laboratory Experiences in Education. **(On Demand) (5)**
A substitute for student teaching for secondary majors. Considers current problems and trends in teaching with laboratory periods for construction of classroom materials. *Prerequisites:* One year of successful classroom teaching experience; Education 241 and 452; scholastic standing of 2.25 or above; completion of 90 semester hours; approval by the Committee on Teacher Education; one semester of residence at Union College.

Education 456. Laboratory Experiences in Education. **(On Demand) (5)**
For secondary majors with same course content and prerequisites as 455 except that four or more years of successful classroom teaching experience must have been completed.

Education 469. Educational Media **(Sum) (3)**
Practice in operating educational media and construction of classroom materials. Emphasis on educational television use in the classroom.

Education 495. Independent Study. **(F,S,Sum) (3)**
Open only to advanced students in the field of Education who wish to do intensive reading in a specific interest area. *Prerequisites:* Twelve semester hours of Education and permission of the Head of the Department.

LIBRARY SCIENCE

Library Science 133. Information Aids to Learning. **(On Demand) (1)**
A study of the techniques and basic tools of information.

SPECIAL EDUCATION — LEARNING AND BEHAVIOR DISORDERS CURRICULUM*

1. General Education
   - A. English Composition ..... 6 semester hours
   - **B. Humanities ..... 18 semester hours
     Three semester hours must be in Literature; remaining hours to be taken from the following: Art; Drama and Speech; Music; Foreign Languages; Religion; Philosophy; English Language and Literature (English 355 may be counted for humanities credit for Special Education only)
   - C. Mathematics and Natural Science ..... 12 semester hours
     Biology, Chemistry, Mathematics, Physics, General Science. At least 3 semester hours shall be in the field of Biological Science and at least 3 semester hours in the field of Physical Science.
   - **D. Social Science ..... 9 semester hours
     History; Economics; Political Science; Sociology, Geography.
   - E. Health and Physical Education in Elementary School ..... 3 semester hours
II. General Requirements
   - A. Structure of the Number Systems ..... 6 semester hours
   - B. Elementary School Art ..... 3 semester hours
   - C. Elementary School Music ..... 3 semester hours
   - D. Special Education 465 Prin. of Behavior Mgt. ..... 3 semester hours
III. Professional Preparation
   - A. Education 241 — Introduction to Education ..... 3 semester hours
   - B. Education 341 — Methods of Teaching Math ..... 3 semester hours
   - C. Education 351 — Human Growth & Development ..... 3 semester hours
   - D. Psychology 361 — Psychology of Learning ..... 3 semester hours
   - E. Education 361 — Reading in the Primary Grades ..... 3 semester hours
   - F. Education 362 — Reading in the Intermediate Grades ..... 3 semester hours
   - G. Education 432 — Methods and Materials in the Elementary School .... 4 semester hours

H. Education 433, 434 — Supervised Student Teaching in the Elementary School ..... 12 semester hours
I. Physical Education — 420 Adaptive PE ..... 3 semester hours

IV. Special Education Core and Area
A. Special Education 365 Foundation in Education of Exceptional Children ..... 3 semester hours
B. Special Education 270 Field Experiences — LBD ..... 3 semester hours
C. Special Education 460 Characteristics of the Children with LBD ..... 3 semester hours
D. Special Education 461 Curriculum Development for Elementary Exceptional Children ..... 3 semester hours
E. Special Education 462 Curriculum Development for Elementary Exceptional Children ..... 3 semester hours
F. Special Education 463 Speech and Language Disorders ..... 3 semester hours
G. Special Education 470 Educational Assessment ..... 3 semester hours
H. Special Education 471 Prescriptive Teaching ..... 3 semester hours
I. Education 440 Introduction to Early Childhood ..... 3 semester hours

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*Curriculum meets the Revised Kentucky State Department of Education Guidelines.
**No more than 6 semester hours in any one discipline.

Special Education 270. Field Experiences with Children with Learning & Behavior Disorders. **(F,S) (3)**
Exposure to private and public educational programs for exceptional children; experience in working with exceptional children on a restricted basis.

Special Education 365. Foundations of Education of the Exceptional Child. **(F) (3)**
Etilogy and assessment of exceptional learning conditions; characteristics of exceptionalities; special education intervention.

Special Education 460. Children with Learning & Behavior Disorders. **(S) (3)**
A study of specific learning disorders resulting in discrepancy between potential and performance in academic tool areas. Emphasis placed on the classroom teacher's role in remediations.

Special Education 461. Curriculum Development for Elementary Exceptional Children. **(F) (3)**
Curriculum needs of elementary exceptional children; materials and teaching methods.

Special Education 462. Curriculum Development for Secondary Exceptional Children. **(S) (3)**
Curriculum needs of secondary exceptional children; materials and teaching methods; work-study programs; vocational and career education.

Special Education 463. Speech and Language Disorders. **(F) (3)**
Theoretical approaches to language and speech development. Etiology of speech and language disorders; therapeutic methods.

Special Education 465. Principles of Behavior Management. **(S) (3)**
Theoretical framework and application of behavior modification techniques; alternative methods of classroom management utilizing operant methods.

Special Education 470. Educational Assessment of Children with Learning & Behavior Disorders. **(F) (3)**
Administration and interpretation of diagnostic instruments. Construction of informal teacher assessment tools; assessment of learning and behavior traits of children with learning & behavior disorders.

Special Education 471. Prescriptive Teaching for Children with Learning & Behavior Disorders. **(S) (3)**
The designing, implementation, and evaluation of individualized programs based on the educationally relevant characteristics of children with learning and behavior disorders.

HOME ECONOMICS

The curriculum is in general home economics with no specialization within the field.

The first two years will be accepted by certain institutions as two years toward the Smith-Hughes or Vocational Home Economics Program.

Union College has a written agreement with the University of Kentucky whereby Union College home economics graduates can obtain a vocational teacher's certificate and a master's degree in home economics education if the graduate meets the requirements of the College of Education at the University of Kentucky. See the suggested undergraduate program to prepare for joint vocational certification and graduate in home economics at the University of Kentucky.

Individual courses may be selected by a student majoring in other departments.

Requirements for a Major: Thirty semester hours in Home Economics in addition to Chemistry 111 and 112. At least eighteen hours must be taken in the Home Economics Department and must include 172, 212, 361, and 431.

Requirements for a Minor: Twenty-one semester hours in Home Economics. At least twelve hours must be taken in the Home Economics Department and must include 172 and 212.

Requirements for an Associate of Applied Science Degree in Secretarial Practice and Home Economics*

Freshman Year			Sophomore Year		
Course	**Fall**	**Spring**	**Course**	**Fall**	**Spring**
Freshman Composition	3	3	Social Science		3
Humanities		3	Natural Science	4	
Principles of Food Preparation	3		Principles of Nutrition		3
Meal Planning and Serving		3	Interior Design or		
Principles of Clothing Construction	3		Management of Family Resources	3	
Tailoring		3	Personal & Community Health	3	
Typewriting 111 or			Office Machines	2	
Business elective	3		Principles of Accounting	3	
Typewriting 112		3	Business Communications		3
Shorthand	3	3	Consumer Economics		3
			electives		4
Total hours	15	18	Total hours	15	16

Suggested undergraduate program to prepare for joint vocational certification and graduate program in Home Economics at the University of Kentucky.

I. General Education

Humanities — 24 hours
- English Composition — 9 hours
- Art — Art 132, Introduction to Art
- Literature — 3 hours to be selected from:
  - English 221-222, Survey of English Literature
  - English 341-342, Survey of American Literature

*Two year students may elect to receive the Associate in Arts or Associate in Science degree by completing the General Education requirements for the B.A. or B.S. degree.

Speech 131, Fundamentals of Speech — 3 hours
Electives — 6 hours (no more than 6 hours from any one discipline.)

Natural Science 13 hours
Biology — 4 hours
Chemistry 111-112, 122, General Chemistry — 9 hours

Social Science 15 hours
Psychology 111, Introduction to Psychology — 3 hours
Sociology — 3 hours
Economics — 3 hours to be selected from:
Economics 153-154, Principles of Economics
Electives — 6 hours (no more than 6 hours from any one discipline and does not include Psychology).

Education 6 hours
Education 241, Introduction to Education — 3 hours
Education 351, Human Growth and Development — 3 hours

Health 3 hours
Elective — 3 hours

Total General Education 63 hours

Note: At least forty semester hours must be in courses numbered 300 and above.

II. Home Economics

Textiles and Clothing: 9 hours
H. Ec. 211, Principles of Clothing Construction and Selection — 3 hours
H. Ec. 212, Tailoring — 3 hours
H. Ec. 401, Textiles — 3 hours

Management and Family Economics: 10 hours
H. Ec. 341, Management of Family Resources — 3 hours
H. Ec. 431-432, Home Management & Family Relationships Laboratory — 4 hours
Economics 353, Consumer Economics — 3 hours

Human Development and Family Relations: 10 hours
Psychology 210, Child Development — 4 hours
Sociology 271, Marriage and the Family — 3 hours
H. Ec. 495, Child Guidance — 3 hours

Nutrition and Food Service 9 hours
H. Ec. 171, Principles of Food Preparation — 3 hours
H. Ec. 172, Meal Planning and Service — 3 hours
H. Ec. 361, Principles of Nutrition — 3 hours

Housing and Interior Design: 9 hours
Art 201, Art Fundamentals — 3 hours
H. Ec. 360, Household Equipment — 3 hours
H. Ec. 451, Interior Design — 3 hours

Health: 3 hours
Health 270, Personal and Community Health — 3 hours
Total Home Economics 50 hours

III. Electives *15 hours*

Total Hours 128 hours

Home Economics 171. Principles of Food Preparation. **(F) (3)**
Elementary principles of food preparation; analysis of basic recipes; developing techniques in the kitchen; and use and care of kitchen equipment.

Home Economics 172. Meal Planning and Serving. **(S) (3)**
Selecting, purchasing, preparing, and serving meals for various occasions. *Prerequisite:* Home Economics 171 or equivalent.

Home Economics 211. Principles of Clothing Construction and Selection. **(F) (3)**
Selection of designs and fabrics; use of commercial patterns; techniques in fundamental construction process in making simple garments; and use of sewing machine.

Home Economics 212. Tailoring. **(S) (3)**
Design in clothing and tailoring; the principles and practices involved in the tailoring of women's and men's coats and suits. Custom tailoring techniques used. *Prerequisite:* Home Economics 211 or equivalent.

Home Economics 341. Management of Family Resources. **(F) (3)**
Philosophy and concepts of home management. Study of the mechanics of time, energy, and money management in pertinent managerial areas. (Odd years only.)

Home Economics 360. Household Equipment. **(S) (3)**
A study of the selection, arrangement, operation, care and demonstration of household equipment. (Odd years only.)

Home Economics 361. Principles of Nutrition. **(S) (3)**
Diet problems; study of nutrients and their relationships to health.

Home Economics 401. Textiles. **(S) (3)**
Textile fiber, yarns, and fabrics; their source, productions, manufacture, properties and identification. The selection, use, and care of modern textiles. (Even years only.)

Home Economics 431-432. Home Management and Family Relationships Laboratory. **(F-S) (2-2)**
Each student is limited to four hours credit. A residence period in the Home Management House is required of seniors majoring in Home Economics. Experience in the application of principles presented in other courses. Admission by permission of the instructor.

Home Economics 451. Interior Design. **(F) (3)**
Study of the major elements used in interior design emphasizing fabric and color schemes. Practical and aesthetic basis of design in the home. (Even years only.)

Home Economics 495. Independent Study. **(F,S) (3)**
The student selects a problem and works under the supervision of the instructor. Designed for the advanced student.

The following courses may count toward a home economics major or minor:

Art 201 Art Fundamentals
Psychology 210 Child Development
Sociology 271 Marriage and the Family
Health 270 Personal and Community Health
Education 351 Human Growth and Development
Economics 353 Consumer Economics

3. DEPARTMENT OF HEALTH, PHYSICAL EDUCATION & RECREATION

Paul S. Moore, *Department Head*
Health — Physical Education — Recreation

HEALTH

Students preparing to teach in an elementary or secondary school in Kentucky are required to complete the following courses: for an elementary certificate, Health and Physical Education in the Elementary School; for a secondary certificate, Personal and Community Health.

Requirements for a Major in Health Education: For students choosing to get a teaching certificate, thirty semester hours from the courses listed under the Health department including 270, 330, and 340. In addition to the courses listed under the Health department, the following courses may be taken as electives to be included in the thirty semester hours: Sociology 271, Sociology 311, Home Economics 361, and Psychology 431.

Requirements for a Minor in Health Education: Twenty-one semester hours which must include Health 270, 330, and 340. Courses must be chosen from those listed under Health Education major.

Requirements for a Major in Community Health: For students choosing not to get a teaching certificate, thirty semester hours which must include 270, 340, and 421. The remaining hours should be selected from the following suggested courses: 131, 475, and 485. In addition, the following courses may be taken as electives in the thirty hours: Sociology 271, 311, Home Economics 361 and Psychology 431.

Health 131. First Aid and Safety. **(S) (3)**
Designed to aid the student in developing an understanding on the basic principles of accident prevention as applicable to the home, the highway, and the school. Special attention is directed to first aid and measure for various injuries and illnesses.

Health 270. Personal and Community Health. **(F) (3)**
The relationship of bodily functions to personal health and grooming, and to community and national health.

Health 330. School Health Practices. **(S) (3)**
A course dealing with the primary phases of school health — health instruction, health services, and healthful school environment — and how they can be coordinated into a functional health program.

Health 340. Physiology and Anatomy. **(F) (3)**
Basic instruction in the functioning of the cells, organs, and systems of the human body.

Health 411. Health Education in the Secondary School. **(S) (3)**
The experiences, activities, and instruction of secondary students that lead to intelligent self-direction of health behavior.

Health 421. Community Health. **(F) (3)**
The social and cultural factors, the physical environment, and the health agencies and services as they relate to the health of the community.

Health 451. School and Community Health Workshop. **(Sum) (3)**
Reveals the relationship needed between the school and community to promote the total health of the population. Speakers are secured from official agencies, voluntary agencies, professional agencies, sponsored agencies, and other colleges. Small groups are utilized for discussion, field trips, and study through audio-visual aids.

Health 475. Critical Areas in Health. **(S) (3)**
Specific health problems confronting society today with particular reference to secondary age students.

Health 485. Field Experiences in Health. **(F,S,Sum) (3-6)**
A directed field experience in some phase of health, with consideration given to both the needs and interests of the student. Opportunities will be available for practical experiences in the school situation, official health agencies, and voluntary agencies.

Health 495. Independent Study. **(F,S,Sum) (1-3)**
Independent study for advanced students only.

PHYSICAL EDUCATION

Requirements for a Major in Physical Education: Thirty semester hours which must include 351, 361, 421, Health 340, and four service courses. In addition the following courses may be taken as electives to be included in the thirty hours: Recreation 265, 321.

Service Courses

A maximum of eight semester hours of service courses may be credited toward graduation. Physical education majors must take four service courses. This is the maximum that can be applied to a major, but others may be taken as electives:

Physical Education 111. Beginning Swimming **(F,S,Sum) (1)**

Physical Education 112. Intermediate Swimming. **(F,S,Sum) (1)**

Physical Education 113. Senior Life Saving. **(F) (1)**

Physical Education 121. Team Sports. **(F) (1)**

Physical Education 131. Archery and Badminton. **(F,S) (1)**

Physical Education 132. Beginning Golf. **(F,S,Sum) (1)**

Physical Education 133. Beginning Tennis. **(F,S,Sum) (1)**

Physical Education 135. Tumbling and Trampolining. **(S,Even Year) (1)**

Physical Education 141. Folk Dancing. **(S, Odd Year) (1)**

Physical Education 142. Social Dancing. **(F, Even Year) (1)**

Physical Education 145. Karate. **(on demand) (1)**

Physical Education 241. History of Physical Education. **(S) (3)**
From primitive man through the present, with particular emphasis on Greek physical education, European systems, and development of physical education in America. Some research into the history of various sports. (Even years only.)

Physical Education 251. Movement Experiences for Children. **(on demand) (3)**
This course will introduce Physical Education teachers to the basic skills patterns which are common to all movement. It is designed to contribute to the teacher's understanding of movement and of the wide movement proposed for today's elementary school child.

Physical Education 252. Physical Education for Exceptional Children. **(on demand) (3)**
This course is designed primarily for Elementary and Physical Education majors interested in working with atypical children. To get some practical experience the student will spend a portion of time working with atypical children in the classroom situation. Extensive treatment will be given to the manner in which Physical Education may be adapted to meet more adequately the needs of exceptional children.

Physical Education 253. Program Development for the Elementary Child. **(on demand) (3)**
In this course students will develop varied programs based on needs, characteristics, abilities, and basic urges of children that relate to the basic purposes of Physical Education. Emphasis is placed on building programs on basic movement, rhythms, physical developmental activities, stunts and tumbling, games and relays.

Physical Education 261. Health and Physical Education in the Elementary School. **(F) (3)**
The role of the classroom teacher in physical education on the playground, in the gymnasium, and the classroom. How to correlate and evaluate. The application of games, movements, exploration, rhythms, self-testing activities, and screening tests.

Physical Education 271. Sports Officiating. **(F) (2)**
Rules and officiating techniques in football, basketball, baseball, and track.

Physical Education 275. Principles of Dance. **(S) (2)**
Elementary rhythms, folk, square, social and modern dance. (Even years only)

Physical Education 302. Coaching Basketball. (Even years only) **(F) (2)**

Physical Education 303. Water Safety Instruction. **(S) (2)**
Prerequisite: Senior Life Saving (113)

Physical Education 304. Coaching Baseball. (Odd years only) **(S) (2)**

Physical Education 305. Coaching Track and Cross Country. **(on demand) (2)**

Physical Education 317. Organization and Administration of Intramurals. **(F) (3)**
Planning, organizing, and directing a program of intramural activities for men and women. Attention is given to activities, awards, officials, finances, publicity, and other factors necessary to consider in administering an intramural program.

Physical Education 351. Testing and Measurements in Physical Education. **(S) (3)**
Evaluating physical education by the construction and administering of tests. Emphasizes reliability, objectivity, and validity of tests, and the use of test results, motivation and school marks.

Physical Education 361. Organization and Administration of Health and Physical Education. **(S) (3)**
Administration of health and physical education in school. Setting up the program, and evaluating results. Emphasizes budget and finance, office management, preparing the curriculum, facilities, legal factors, and public relations.

Physical Education 420. Adapted Physical Education. **(S) (3)**
Health conditions which require the physical education program to be adapted to meet the special needs of individuals with handicapping conditions.

Physical Education 421. Anatomy and Kinesiology. **(F) (3)**
An analysis of human motion and its relation to athletic and gymnastic activities; practical application of these principles.

Physical Education 435. Coaching and Officiating Team Sports. **(S) (3)**
Theory and practice of techniques employed in field hockey, volleyball, softball, and soccer, with emphasis on methods of teaching. (Even years only.)

Physical Education 471. Seminar in Conducting Physical Activities. **(on demand) (3)**
Seminar on the problems involved in the teaching of physical skills in the required program with an opportunity to gain practical experience.

Physical Education 495. Independent Study. **(F,S,Sum) (3)**
Independent work for advanced students only.

RECREATION

Requirements for a Major in Recreation: Thirty semester hours including 141, 321, and 472. Remaining hours should be selected from the following: 265, 345, and 485. In addition, courses may be selected from the following to be included in the thirty semester hours: P.E. 111, 113, 121, 131, 132, 133, 135, 141, 142, 271, 275, 303, 317; Health 131; Art 241; Drama 331; Music 161. Recreation majors must also take four service courses. 6 to 12 hours of field experience recommended.

Requirements for a Minor in Recreation: Twenty-one semester hours which must include 141, 321, and 472. Other courses must be chosen from those listed under Recreation.

Requirements for the Associate of Applied Science Degree in Recreation:

Freshman Year

Course	Hours
Freshman Composition	6
Introduction to Sociology	3
Foundations of Music	4
Safety and First Aid	3
Recreational Arts and Crafts	3
Foundations for Recreation	3
Physical Education Electives	2
Electives chosen from the general college course requirements	8
	32

Sophomore Year

Course	Hours
Principles of Dance	2
Recreational Sports and Activities	3
Sports Officiating	2
Personal and Community Health	3
Field Experiences	6
Organizations and Administration of Intramurals	3
Recreational Leadership	3
Physical Education Electives	2
Electives chosen from the general college course requirements	8
	32

Recreation 141. Foundations for Recreation. **(F) (3)**
This course is designed as an introduction to the recreation profession. The nature of recreation, the influence of leisure, the recreation philosophy, and employment possibilities are explored.

Recreation 265. Recreational Sports and Activities. **(S) (3)**
Presents students with information on various types of sports and activities, with emphasis on history, rules, equipment, skills, and techniques.

Recreation 285. Field Experiences in Recreation. **(F,S,Sum) (3-12)**
Experience in recreation planning, leadership, supervision, and programs through work in private, public, and voluntary community recreation.

Recreation 321. Recreational Leadership. **(S) (3)**
Leadership techniques in music, social games, arts and crafts, dramatics, camping, nature, and sports. Designed to aid students in enriching their own leisure time and to prepare for leadership in teaching, full-time Christian service, and social service.

Recreation 345. Outdoor Recreation. **(F) (3)**
Develop a knowledge and understanding of outdoor activities as they relate to a variety of settings.

Recreation 472. Planning Recreation Programs. **(S) (3)**
Comprehensive course in recreation program planning, development, and leadership techniques with individuals and groups. Students plan a one-year program.

Recreation 485. Field Experiences in Recreation. **(F,S,Sum) (3-12)**
Same course description as 285

Recreation 495. Independent Study. **(F,S,Sum) (3)**

Division of Humanities

Allan E. Green, *Chairman*

Department of Fine Arts | Department of Languages

Department of Religion and Philosophy

1. DEPARTMENT OF FINE ARTS

Leo E. Dontchos, *Department Head*

Art — Drama and Speech — School of Music

ART

Union College course offerings in the field of art provide service courses for several curricula and opportunities for exploration and growth in artistic self-expression.

Art 132. Introduction to Art. **(S) (3) (H)**
An introduction to Art outlining basic approaches, principles, techniques and media as well as styles of expression, both past and present.

Art 201. Art Fundamentals. **(F) (3)**
A study of the visual elements of form and the principles of organization through their application to two and three dimensional design problems.

Art 211. Drawing **(S) (3)**
A studio course which acquaints the student with a variety of drawing media. The approach is representational to enable the student to acquire technical skills in rendering.

Art 241. Recreational Arts and Crafts. **(F) (3)**
The development of skills in arts and crafts with particular attention to recreational applications. (Even years only.)

Art 271. Elementary School Art. **(F) (3)**
A studio course involving many kinds of art projects in many media, suitable and practicable for elementary grades.

Art 495. Independent Study in Art. **(F,S) (3)**
Independent study or research on an approved topic, or guided independent studio work. May be repeated for credit.

DRAMA AND SPEECH

Requirements for a Major in Drama and Speech: Thirty-six semester hours, including Drama 251, 352, 331, 332, 365, 366, 451, Speech 131 and 231, two courses in dramatic literature selected from approved offerings in either the Drama or English areas, and three hours of practical experience (Drama 151).

Requirements for a Minor in Drama and Speech: Twenty-one semester hours, including Drama 251, 331, or 332, 365, 366.

Drama 131. Introduction to the Theatre. **(F) (3) (H)**
Basic principles underlying the origin and development of theatrical presentation. Brief study of elements of production.

Drama 151. Theatre Practicum **(F,S) (1) (H)**
Actual practical experience in major college theatrical productions in the areas of acting, directing, and production work. May be repeated three times for credit.

Drama 251. Fundamentals of Acting. **(S) (3)**
Theory and practice behind analysis and presentation of a role. (Even years only.)

Drama 321. European Drama since 1945. **(F) (3) (H)**
A study of representative plays in translation by modern writers from Germany, France, Italy and Poland. (Odd years only.)

Drama 331. Play Production. **(F) (3)**
Study and practice in theatrical design and stage lighting. *Prerequisite:* Drama 131 or permission of instructor. (Odd years only.)

Drama 332. Play Production. **(S) (3)**
Study and practice in theatrical costuming and make-up. *Prerequisite:* Drama 131 or permission of instructor. (Odd years only.)

Drama 352. Advanced Acting. **(S) (3)**
Scene study and period styles of acting. *Prerequisite:* Drama 251 or permission of instructor. (Odd years only.)

Drama 365. History of the Theatre. **(F) (3) (H)**
Study of theatrical presentation from the Golden Age of Greece to Ibsen. *Prerequisite:* Junior or senior standing or permission. (Even years only.)

Drama 366. History of Modern Theatre. **(S) (3) (H)**
Study of theatrical presentation from Ibsen to present. *Prerequisite:* Junior or senior standing or permission. (Even years only.)

Drama 451. Directing. **(S) (3)**
Study and analysis of scripts for production and of production techniques. Staging of one-act play required. *Prerequisite:* Permission of instructor.

Drama 495. Independent Study in Drama. **(F,S) (3)**
Independent study or research on an approved topic. May be repeated for credit.

Speech 131. Fundamentals of Speech. **(S) (3) (H)**
Study and practice in the basic elements of speech applicable in daily life, such as voice, articulation, pronunciation, bodily activity, speech organization, outlining and research.

Speech 231. Interpretative Reading. **(F) (3) (H)**
Analysis and oral interpretation of the various forms of literature. Special emphasis on developing qualities for interpretation of character, emotion, and artistic impersonation.

SCHOOL OF MUSIC

The School of Music functions within the total academic structure of Union College and participates in the granting of the following degrees: Bachelor of Music (Applied Music or Music Education Major), Bachelor of Arts (major in music), and Bachelor of Science (major in Music or Business/Music combination major).

The purposes of the School of Music are: To offer intensive professional training to the music major and to provide the general college student with the opportunity to become acquainted with music as one aspect of a liberal culture, either as appreciative listeners or as trained participants; to prepare students for graduate study, as church organists and choirmasters, as private teachers of music, and as teachers of music for the public schools.

Admission. The requirements for admission to the School of Music are the same as for admission to the College.

Regulations. All academic regulations and other requirements and specifications of the Union College catalog will apply unless specific mention is made in the School of Music section of the catalog.

No Special Music Fees. No special fees exist for private lessons in music. Students majoring in other fields of study may avail themselves of class lessons in piano, voice, wind, and stringed instruments. Upon sufficient advancement, these students also may receive private instruction without any special fee being charged.

Advanced Placement and Curriculum Acceleration. The School of Music recognizes that its students come with widely varying backgrounds and abilities. In the case of the student with a superior pre-college background in music, advanced placement by examination is possible. In

addition, it is also possible for the outstanding student to accelerate his progress through the curriculum by opting for independent study. This process, however, places the responsibility for meeting curricular requirements squarely on the student. In the case of curriculum acceleration, a minimum of three years is required, principally to assure sufficient grounding in the applied music area. Permission of the Director of the School of Music and the student's major professor is required.

Preparatory Department. Preparatory work in piano, wind, voice, and stringed instruments is offered in the form of class or private lessons for pre-college students. There is a fee charged for these lessons. A similar arrangement is available for special students of college age and above who are not enrolled as full-time students in the regular curriculum.

Teacher Certifications. The degree program in Music Education, leading to the Bachelor of Music, fulfills the Kentucky requirements for teacher certification. Kentucky teacher certification is reciprocal with most other states.

Piano Proficiency. All music majors must pass a proficiency examination in piano prior to graduation.

Ensemble Requirement. All majors are required to participate a minimum of seven semesters in one ensemble and a minimum of four semesters in another ensemble area.

Program Attendance. All applied students are required to attend all Monday afternoon recitals

Majors. All majors are required to attend three-fourths* of the total number of programs. A year's work in the applied field is not complete until the recital requirements are fulfilled.

Minors. All minors are required to attend one-half* of the total number of programs.

Others registered for applied music. Others registered for applied music must attend one-third* of the total number of programs.

Music 321, 322, and Music 121-122. Recital attendance for students in Music 321 and 322, as well as Music 121 and 122 is at the discretion of the teaching staff.

Student Recitals. Student recitals will be held on the third Monday of each month at 4:00 p.m. With the exception of first semester students, all applied students must perform a minimum of one time each semester.

Each student majoring in music presents a junior recital of at least thirty minutes performing time and a senior recital of at least forty-five minutes performing time.

Recital Examinations Junior and Senior recital examination shall be given no later than two weeks prior to the recital.

Music Library. The music library, located in the Fine Arts Building, contains records, scores, and listening facilities.

Minor in Music. Twenty-one semester hours, including: Music 161, 162; three semester hours selected from either Music 321 or 322; two semester hours of music electives; two years of ensemble; and completion of the 202 level of course numbering in one field of applied Music, or eight hours of applied music arranged differently with the consent of the department.

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*The total number of programs is made up of all School of Music programs, Artist Series programs, and Southeastern Kentucky Concert Series programs on campus. Recital attendance credit may also be obtained by attending Southeastern Kentucky Concert Series programs held off campus. Check the Music bulletin board for the total number of programs for the current semester.

Music Major, B.A. and B.S.

Please see general requirements.

Academic Emphasis	Sem. Hrs.
Foundations of Music	8
Harmony	6
Form and Analysis	4
Music History	12
Applied Music	8
Ensemble	0
Music Elective	2
	40

Applied Emphasis	Sem. Hrs.
Foundations of Music	8
Harmony	6
Form and Analysis	4
Music History	6
Applied Music	16
Ensemble	0
	40

Bachelor of Science
Combination Music and Business Major

Business Core

	Hours
B.Ad. 271 Principles of Marketing	3
B.Ad. 351 Principles of Finance	3
B.Ad. 352 Principles of Management	3
B.Ad. 411 Business Law	3
Acct. 171-172 Prin. of Accounting	6
Comp. Sci. 131 Intro. to Data Proc.	3
Econ. 153-154 Principles of Econ.	6
	27

Additional Business Requirements

B.Ad. 272 Salesmanship	3
Off. Ad. 312 Business Comm.	3
U.D. Elective	3
	9
Field Placement	3-10

Music Area

	Hours
Music 161-162 Found. of Music	8
Music 261-262 Harmony	6
Music 111-412 Applied Music	16
Music 322 Music History	3
Music 171-176 String Class, Piano, Woodwind Class, or Brass Class (choice of any 3)	3
	36

General Requirements

Freshman Composition	6
Humanities	12
Social Science	3
Natural Science	8
Electives	17-24

Within the Business Core and Requirements, the Music Area, and Field Placement, there is a total of 21-36 hours of upper division courses. This leaves 4-19 hours of upper division courses that *must* be taken from the electives or general requirements.

Music Requirements.

Bachelor of Music Degree (Applied Music)

Academic	Sem. Hrs.
Foundations of Music	8
Harmony and Ear Training	8
Form and Analysis	4
Counterpoint	4
Music History	6
Applied Field Literature	4
	34

Applied	Sem Hrs.
Major Applied Study	24
Recitals	2
Piano Secondary+	4
Stringed Instruments Class+	2
Wind Instruments Class+	2
Voice Class+	1
Pedagogy	1
Ensemble	0
	36

General Requirements.

	Sem. Hrs.
Humanities	12
English 111-112	6
Foreign Language	12
Science	4
Social Science	9
Electives	15
	58

Music Requirements.

Bachelor of Music Degree (Music Education)

Academic	Sem. Hrs.
Foundations of Music	8
Harmony and Ear Training	8
Form and Analysis	4
Music History	6
Conducting	4
Secondary School Music	3
Music Arranging	2
	35

Applied	Sem. Hrs.
Major Applied Study	16
Recital	0
Piano Secondary+	4
Stringed Instruments Class+	2
Wind Instruments Class+	2
Voice Class+	1
Ensemble	0
	25

General Requirements. This includes both the regular college requirements and the education Certification Requirements for the music education major. Music majors seeking the BM degree may use 9 hours of music to help fulfill humanities requirements.

APPLIED MUSIC

The study of music through the development of performance skills is the central core in the training and growth of the musician. Instruction is offered in the following instruments: piano, organ, voice, woodwinds, brass, strings, and percussion. The following goals are common to all applied music study:

developing in the student a high level of technical proficiency;

acquainting the student with the learning processes involved in that development;

familiarizing the student with a body of musical literature appropriate to his instrument;

assisting the student in mastering a representative sample of that repertory.

Complete outlines of the levels of technical proficiency and repertory expected at the end of each semester of study are given to the student at the beginning of the semester. These are organized in an eight semester sequence designed to insure that the student completing the sequence has achieved a level of mastery appropriate to a baccalaureate music degree. Similar outlines exist for students enrolling for applied music study at the minor or elective level. The content of these applied music course outlines is for the guidance of the student and the teacher, and is therefore a flexible rather than a rigid description of the requirements. Copies of these outlines may be requested from the Head of the Department of Fine Arts.

+Certain of these may be waived or passed by examination if the skill involved coincides with the student's Major Applied study area. In this case the equivalent number of ensemble hours may be applied toward the total needed for graduation.

SECONDARY LEVEL

These courses are designed for general college students enrolling for applied music study as an elective, and for use as a secondary applied field for music majors and minors.

***Music 101-102. Applied Music.** **(F,S) (1-2)**
Freshman level secondary applied music study.

***Music 201-202. Applied Music.** **(F,S) (1-2)**
Sophomore level secondary applied music study.

***Music 301-302. Applied Music.** **(F,S) (1-2)**
Junior level secondary applied music study.

***Music 401-402. Applied Music.** **(F-S) (1-2)**
Senior level secondary applied music study.

MAJOR LEVEL

These courses are designed for music majors enrolled in the Bachelor of Music Curriculum and for students seeking a Bachelor of Arts or a Bachelor of Science degree with a music major or minor.

***Music 111-112. Applied Music.** **(F,S) (2-3)**
Freshman major or minor level applied music study.

***Music 211-212. Applied Music.** **(F,S) (2-3)**
Sophomore major or minor level applied music study.

***Music 311-312. Applied Music.** **(F,S) (2-3)**
Junior major level applied music study.

Music 317. Junior Recital. **(F,S) (0-1)**

***Music 411-412. Applied Music.** **(F,S) (2-3)**
Senior major level applied music study.

Music 415-416. Applied Field Literature. **(on demand) (2)**
A study of the literature available for the student's major instrument, and related instruments where appropriate, with attention to stylistic characteristics and ornamentation.

Music 417. Senior Recital **(F,S) (0-1)**

Music 418-419. Sight Reading and Accompanying. **(on demand) (1)**
Proficiency in reading the various clefs, vocal scores, and accompaniments, with emphasis on the techniques of sensitive accompanying. Keyboard majors and selected minors only.

HISTORY AND APPRECIATION

Music 121. Introduction to Music. **(F) (3) (H)**
A study of musical matters and styles for the student with a limited musical knowledge. Not open to music majors or music minors.

Music 122. Introduction to the History of American Popular Music. **(S) (3) (H)**
An historical approach involving the study of styles and personalities beginning with the origins of jazz and ending with the current trends and concepts of today. Open to all students.

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*Applied Music may be taken for Humanities credit under special arrangement. Consult with the Head of the Fine Arts Department for details.

Music 321,322. Music History. **(F,S) (3-3) (H)**
A study of representative music both written and recorded, and readings, coordinating and integrating music skills. *Prerequisite:* Music 162 or permission of the instructor.
(321) Antiquity through 1750.
(322) Classic period to the present.

Music 421-422. Music History Seminar. **(on demand) (3-3)**
Intensive study of a selected period or genre. Major paper required. *Prerequisite:* Music 321-322.

ENSEMBLES

Music 151. Chorus. **(F,S) (0-1)**
Open to all college students; performs major choral works in concerts. One rehearsal per week. May be repeated for credit.

Music 152. Choir. **(F,S) (0-1)**
Open by audition only; performs in chapel, Christmas concert, yearly tour, spring concert, graduation. Limited to forty-nine students; four rehearsals per week. May be repeated for credit.

Music 153. Stage Band. **(F,S) (0-1)**
Open by audition only. A jazz oriented ensemble of appropriate instrumentation limited to twenty students. Two rehearsals per week. May be repeated for credit.

Music 154. Wind Ensemble. **(F,S) (0-1)**
Open to all those interested in band music. Two rehearsals per week. May be repeated for credit.

Music 155. Brass Chamber Ensemble. **(F,S) (0-1)**
Open by audition only. Size and make-up will vary with the needs and interests of the students enrolled. One rehearsal per week. May be repeated for credit.

Music 156. Collegium Musicum. **(on demand) (0-1)**
Open to interested students. A performance group intended to give the student acquaintance with less frequently performed literature. One rehearsal per week. May be repeated for credit.

Music 157. Woodwind Chamber Ensemble. **(on demand) (0-1)**
Open by audition only. Size and make-up will vary with the needs and interests of the students enrolled. One rehearsal per week. May be repeated for credit.

Music 158. String Chamber Ensemble. **(on demand) (0-1)**
Open by audition only. Size and make-up will vary with the needs and interests of the students enrolled. One rehearsal per week. May be repeated for credit.

Music 159. Percussion Ensemble. **(on demand) (0-1)**
Open by audition only. Size and make-up will vary with the needs and interests of the students enrolled. One rehearsal per week. May be repeated for credit.

Music 357. Opera Workshop. **(on demand) (0-1)**
Experience in the standard and contemporary opera repertoire; preparation and presentation of complete operas and programs of excerpts, with costumes and scenery. Admission by audition only. May be repeated for credit.

THEORY

Music 161-162. Foundations of Music. **(F,S) (4-4) (H)**
A combined course in the areas of music theory, history, and literature. Five periods per week.

Music 261-262. Harmony.+ **(F,S) (3-3) (H)**
Continuation of Music 161-162 in the area of part-writing and analysis. Advanced chromatic harmony of the middle Romantic period. Three periods per week. *Prerequisite:* Music 162.

Music 263-264. Ear Training. **(F,S) (1-1)**
Sight singing, ear training, and dictation to be taken concurrently with Music 261-262. Two periods per week. *Prerequisite:* Music 162.

Music 361-362. Form and Analysis.+ **(F,S) (2-2) (H)**
The development of musical forms from small units to large. Study of large scale analytic techniques including those necessary for late 19th and early 20th Century Music. *Prerequisite:* Music 262.

Music 365. Music Arranging. **(F) (2)**
Basic techniques of orchestration and arranging. *Prerequisite:* Music 262.

Music 461-461. Counterpoint. **(on demand) (2-2)**
The vocal counterpoint of Palestrina and the instrumental counterpoint of Bach. *Prerequisite:* Music 162.

Music 465. Theory Seminar. **(on demand) (3)**
An advanced course in music theory, including a study of contemporary practices. *Prerequisite:* Music 362, and permission of the instructor.

MUSIC EDUCATION

Music 171-172. String Instruments Class. **(F,S) (1-1)**
Class instruction in string instruments.

Music 173-174. Piano Class. **(F,S) (1-1)**
Class instruction in piano.

Music 175-176. Wind and Percussion Instruments Class. **(F,S) (1-1)**
Class instruction in woodwind, brass, and percussion instruments.

Music 177-178. Voice Class. **(F,S) (1-1)**
Class study for students who are not prepared to study at the level of private applied voice.

Music 373. Elementary School Music. **(S) (3)**
Methods and materials in the elementary school. Will include functional ability at the piano keyboard, the fundamentals of music, and library research.

Music 374. Secondary School Music. **(F) (3)**
Methods and materials for junior and senior high school. Will include research projects. *Prerequsite:* Junior standing in the School of Music or permission of the instructor.

Music 473-474. Conducting. **(F,S) (2-2)**
Basic techniques of the art of conducting; score reading, both vocal and instrumental; rehearsal techniques; balance and interpretation; organization; survey and study of literature; practical work with ensembles.

Music 475. Pedagogy. **(on demand) (1)**
Techniques and principles of private and class instruction with examination of carefully considered and recommended materials.

INDEPENDENT STUDY

Music 495. Independent Study. **(F,S) (2-3)**
Independent study and/or research on an approved topic. *Prerequisite:* Permission of the student's major professor. May be repeated for credit.

+ Students considering electing advanced music theory courses for Hunanities credit should consult with the instructor to determine the extent of prior background needed for these courses.

2. DEPARTMENT OF LANGUAGES

W. Gordon Marigold, *Department Head*
English — French — German

ENGLISH

Requirements for a Minor: A minimum of twenty-four semester hours including 111, 112. This must include six hours of English literature survey; American literature survey 341; three hours of Shakespeare: 371 or 372; and one genre course from 351, 352, and 451.

Requirements for a Major: A minimum of thirty semester hours in addition to English 110, 111, 112, including the requirements noted for Minors; 401 or 421; one further advanced course, preferably a seminar course at the 400 level, determined by consultation. English majors are also advised to take at least six hours of a foreign language.

Requirements for an Area: Forty-eight hours, thirty of which shall satisfy the requirements for a major, and including an advanced writing course; one additional period course selected from 321, 322, 331 and 332; and courses in speech or drama.

Students preparing to teach high school English are required to take Education 362 and should elect the English major. English minors who expect Department recommendation for teacher training should consult the department Head about their individual needs for advanced courses.

A general prerequisite for 200 level courses is the successful completion of English 111, 112. Students are urged to take English 221, 222 before entering more advanced courses. Students who have not taken English 221, 222 are urged to consult with members of the Department before enrolling for advanced work.

English 110. Elementary Freshman Composition. **(F,S) (3)**
A course in basic writing skills of progressing complexity beginning with the sentence and ending with the theme. Must be followed by English 111.

English 111. Freshman Composition. **(F,S) (3)**
Writing of descriptive, expository, and argumentative themes and documented papers. Study of the essay as a model and for discussion. Must precede English 112.

English 112. Freshman Composition. **(F,S) (3)**
Literary models and a brief introduction to literary forms provide the basis for longer themes emphasizing critical writing and documentation.

English 221-222. Survey of English Literature. **(F,S) (3,3) (H)**
From *Beowulf* into the 20th century. The first half includes the Middle Ages and Renaissance and the second starts with the Neo-classical and continues through the Romantic and Victorian periods. Either course may be taken separately and not necessarily in sequence.

English 321. Sixteenth and Seventeenth Century Literature. **(F) (3) (H)**
A study of non-dramatic poetry and prose beginning in the early Renaissance (with emphasis on such figures as Sidney and Spenser), continuing through the metaphysical poets and the Cavalier poets, and culminating in Milton. (Odd years only.)

English 322. Restoration and Eighteenth Century Literature. **(S) (3) (H)**
Prose and poetry of the neo-classical age, beginning with Dryden and his contemporaries and extending through Samuel Johnson. (Odd years only.)

English 331. English Romantic Period. **(F) (3) (H)**
The prose and poetry of the first third of the 19th century, emphasizing the work of Wordsworth, Coleridge, Byron, Shelley, and Keats. (Odd years only.)

English 332. Victorian Period. **(S) (3) (H)**
Major poets and prose writers, emphasizing the contributions of such masters as Tennyson, Browning, and Arnold. (Odd years only.)

English 341-342. Survey of American Literature. **(F,S) (3,3) (H)**
The first half extends from the colonial writers through Whitman and the second from Dickinson to the mid-20th century. Either course may be taken separately and not necessarily in sequence. (Even years only.)

English 351. The English Novel. **(F) (3) (H)**
The historical study of the growth of the novel as a form, with selected examples from Defoe through Hardy. (Even years only.)

English 352. The American Novel. **(S) (3) (H)**
From the "American Renaissance" of the 19th century through the rise of realism to Faulkner and more recent developments. (Odd years only.)

English 355. Survey of Children's Literature. **(F) (3)**
Designed to familiarize the student with books and other library materials suitable for supplementing the curriculum and encouraging recreational reading in the elementary school. (Cannot be used toward humanities general requirement, major, minor, or area in English.)

English 371-372. Shakespeare. **(F,S) (3,3) (H)**
An intensive and critical study of selected plays, focusing on their timeless human, literary, and dramatic qualities. Each course may be taken separately and not necessarily in sequence. A general prerequisite for 400 level courses is junior standing.

English 401. Modern Grammar. **(S,Sum) (3)**
A survey of modern approaches to the study of language beginning with the structuralist view of linguistic analysis through the theories of generative grammar to the most recent developments in generative semantics. Considerable attention will be paid to the possibilities of practical applications of linguistic theory. (Even years only.)

English 402. Advanced Composition. **(on demand) (3)**
For the student who wishes to become a more competent writer. Research papers, factual narratives, argumentation, and "creative" writing are assigned according to the needs and aptitude of the student.

English 419. Composition for Teachers of English. **(S) (3)**
Designed to train teachers of secondary school English composition and to indirectly improve the writing of their students. The instructor will utilize the contributions of his colleagues. Required for certification to teach secondary English. (Odd years only.)

English 421. History of the English Language. **(F) (3) (H)**
A study of the origins and developments of the English language from Anglo-Saxon times to the present. Supplementary readings in early and medieval English history with emphasis on the effects of historical events on language change. (Odd years only.)

English 451. Modern Poetry. **(F) (3) (H)**
American and British poetry, with consideration of ways of reading, criticizing, and writing verse in this century. Odd years only.

English 495. Independent Study.+ **(F,S) (3)**
Intensive individual work, under supervision, in some phase of English, American, or world literature, linguistics, or composition not otherwise covered in the curriculum. *Prerequisites:* Twenty-four hours of English above English 111, 112, and permission of the head of the department. May be repeated for credit.

+ May be counted toward the Humanities Requirement if topic approved by Head of the Department of Languages, and filed with the Registrar.

FRENCH

The program offers the opportunity to gain some understanding of France and its culture as well as a basic knowledge of the French language. Students offering more than one entrance unit in French and students transferring from other colleges should consult with the Head of the Department of Languages before registering for any course in French.

French 111-112. Elementary French. **(F,S) (3,3) (H)**
Basic French grammar; practice in the oral and written language. (Odd years only.)

French 211-212. Intermediate French. **(F,S) (3,3) (H)**
More detailed study of grammatical structure; study of important literary works; individual collateral reading. *Prerequisite:* French 111-112 or equivalent. (Even years only.)

French 331. French Civilization. **(S) (3) (H)**
The economic, social, and cultural development of France; French contributions to world civilization. May not count toward fulfillment of the language requirement. No knowledge of French required. (Even years only.)

French 495. Independent Study+ **(F,S) (3)**

GERMAN

The program offers the opportunity to gain some understanding of Germany and its culture as well as a basic knowledge of the German language. Students offering more than one entrance unit in German and students transferring from other colleges should consult with the Head of the Department of Languages before registering for any course in German.

German 111-112. Elementary German. **(F,S) (3,3) (H)**
Basic German grammar; simple reading; practice in the oral and written language.

German 211-212. Intermediate German. **(F,S) (3,3) (H)**
More detailed study of grammatical structure; reading of important literary works; individual collateral reading. *Prerequisite:* German 111-112 or equivalent.

German 331. German Civilization. **(S) (3) (H)**
The economic, social, and cultural development of Germany; German contributions to world civilization. May not count as part of the language requirement. No knowledge of German required. (Odd years only.)

German 495. Independent Study.+ **(F,S) (3)**

3. DEPARTMENT OF RELIGION AND PHILOSOPHY

Robert D. Matthews, *Department Head*

Courses in this Department are designed to acquaint the student with the Judaeo-Christian tradition and the other great religious traditions of mankind and with the great traditions and disciplines of human thought; to deepen his awareness of himself and of the human community; to cultivate his powers of critical examination and the meaning and direction of human existence.

Studies in religion are especially recommended for students of art, history, and literature, and for students preparing for Christian vocations.

Studies in philosophy are especially recommended for pre-professional training for such vocations as the Christian ministry, college teaching, law, journalism, creative writing, and art, as well as for students of history, literature, and the sciences.

Pre-ministerial Preparation. The American Association of Theological Schools has stated that the college work of students planning to enter the ministry should result in at least the following: 1. Ability to speak and write English clearly and correctly, to think clearly, and to read at least one foreign language; 2. Acquaintance with the world of men and ideas, the world of nature, and the world of human affairs; and 3. A sense of achievement through the mastery of fields of study and through honors work or other independent study. The student is expected to become well grounded in English, philosophy, and history, and to gain some background in social studies (especially psychology and sociology), the natural sciences, languages, and religion.

CHRISTIAN EDUCATION

In recognition of increasing demand for trained young men and women as full-time Christian workers in the unordained ministry of the local church, to serve in the capacities of pastor's assistant, director of youth work, or Director of Christian Education, a specific four-year course of study has been arranged, using the facilities of various departments. It is designed to meet the basic needs of students who wish to go directly into church positions without graduate work.

The 24 hour major is recommended in Religion including Rel. 222, plus courses in music, drama and Appalachian studies. A second major or minor in drama or music is often helpful. The following three courses should supplement the major:

Speech 131, Fundamentals of Speech
Recreation 321, Recreational Leadership
Psychology 402, Counseling Theories and Techniques

RELIGION

Requirements for a Major. The twenty-four hour major, recommended for Christian Education and pre-ministerial students, must include courses 111, 112 and 479, plus Philosophy 261. The thirty hour major may include Philosophy 371.

Requirements for a Minor. Twenty-one semester hours, at least nine of which must be in courses numbered above 300.

Religion 101. Conference Studies. **(on demand) (0)**
A study of the books required by the Methodist Church for the local preacher's license. Required of all recipients of ministerial loan-grants who have not yet obtained the license to preach.

Religion 111. Old Testament History, Literature, and Interpretation. **(F) (3) (H)**
The history of Israel from the earliest times to the Maccabean Age. Historical and literary criticism and religious significance of the emergence of Judaism. (Odd years only.)

Religion 112. New Testament History, Literature, and Interpretation. **(S) (3) (H)**
Attention to author, date, origin, historical and religious significance. Religion 111 recommended. (Odd years only.)

Religion 121. Primitive Religions. **(F) (3) (H)**
Survey of the origins and characteristics of rites, legends, and myths of technologically undeveloped societies. (Odd years only.)

Religion 127. Archaeology and the Bible. **(S) (3) (H)**
Exciting archaeological discoveries, especially those related to the Bible, supplemented by wide reading in books, magazines, and newspapers, and class reports, color slides, and movies.

Religion 201-202. Readings in the Greek New Testament. **(F,S) (3,3) (H)**
An inductive approach to koine Greek, recommended especially for pre-seminary students. (Even years only.)

Religion 212. The Old Testament Prophets. **(F) (3) (H)**
The nature of prophecy and the prophetic movement in Israel from its beginning with Moses to its close with the book of Jonah. Religion 111 recommended. (Even years only.)

Religion 222. Administration and Education in the Local Church. **(S) (3)**
Administrative responsibilities of the Director of Christian Education as related to the pastor, local church governing body, and the congregation. Theory and practice of Christian Education with special attention to planning a year's program in the local church.

Religion 231. The Life and Teachings of Jesus. **(S) (3) (H)**
The world in which Jesus was born and an interpretation of his messianic consciousness, personality, activities, and teachings. Religion 112 recommended. (Even years only.)

Religion 241. The Life and Teachings of Paul. **(F) (3) (H)**
The world of Paul, his life, teachings, and significance, using his letters as the primary source. Religion 112 recommended. (Even years only.)

Religion 311. Introduction to Christian Thought. **(S) (3) (H)**
Examination of traditional and contemporary understanding of the Christian faith, with emphasis on the nature of God and of man; the significance of Christ and the Church; the relation of religion to morality; the meaning of Creation and Redemption; and the interpretation of Human Destiny. *Prerequisite:* 112. (Even years only.)

Religion 321. Primitive Religions. **(F) (3) (H)**
Same course as Religion 121, but with more independent research. For upperclassmen. (Odd years only.)

Religion 327. Archaeology and the Bible. **(S) (3) (H)**
Same as Religion 127 but with additional reading and reports.

Religion 353. Church History. **(on demand) (3) (H)**
The origin and development of the Christian Church from its beginning through the Reformation.

Religion 355. World Religions. **(S) (3) (H)**
A descriptive account of the faith and practices of present-day world religions, with emphasis on Hinduism, Buddhism, Confucianism, Islam.

Religion 479. Seminar in Religion. **(on demand) (3) (H)**
Intensive study on a special subject, with oral and written reports. Possible topics include The Fourth Gospel, Apocalyptic Literature, Pauline Theology, Wisdom Literature, The Apostolic Period. *Prerequisite:* Advanced standing and permission of the instructor.

Religion 495. Independent Study. **(F,S) (3)**
Independent study or research on an approved topic. May be repeated for credit.

PHILOSOPHY

Requirements for a Minor: Twenty-one semester hours.

Philosophy 151. Introduction to Philosophy. **(F,S) (3) (H)**
Both a study of the nature of philosophy, its aims, problems, and methods, and an exercise in philosophizing in which the student clarifies constructively and evaluates critically his own and other understandings of life.

Philosophy 202. Logic. **(S) (3) (H)**
Cultivation of rational acuity through an examination of the procedures and limits of rational discourse. (Odd years only.)

Philosophy 261. Philosophy of Religion. **(F) (3) (H)**
An introduction to basic modern concepts, issues, and methods in the philosophical examination of religion. (Odd years only.)

Philosophy 371. Ethics. **(F) (3) (H)**
Cultivation of moral awareness through an examination of human activity, individual and social, with particular reference to the grounds of ethical decision and evaluation. The major theories are examined and related to concrete personal and social problems. (Even years only.)

Philosophy 376. History of Western Philosophy I: Ancient and Medieval. **(on demand) (3) (H)**
Philosophical thinking in its cultural context, from its birth through the classical and medieval eras.

Philosophy 377. History of Western Philosophy II: Modern. **(on demand) (3) (H)**
The rise and development of modern culture and its thought-forms, through the nineteenth century.

Philosophy 378. History of Western Philosophy III. Contemporary. **(on demand) (3) (H)**
Twentieth century western thinking and its nineteenth century backgrounds, with particular reference to pragmatism, phenomenology, existentialism, the analytical movement and dialetical materialsm. *Prerequisite:* any philosophy course.

Philosophy 479. Seminar in Philosophy. **(on demand) (3) (H)**
Intensive study of a special topic such as Epistemology, Metaphysics, Plato, Kant. Permission of instructor required.

Philosophy 495. Independent Study. **(F,S) (3)**
Independent study or reserach on an approved topic. May be repeated for credit.

Division of Natural Sciences

Robert Simpson, *Chairman*
Biology — Chemistry — Environmental Studies
General Science — Mathematics — Physics
Radiologic Technology

PRE-PROFESSIONAL PROGRAMS

Since professional schools vary considerably in their admission requirements, the student is advised to select the professional school he wishes to attend later, and then choose pre-professional courses accordingly. The science faculty should be consulted before registration in order to assist the student in preparing a course schedule. For details of a specific program, the following faculty members should be consulted.

Dentistry — Dr. Scott
Engineering — Dr. Santaram
Medical Technology — Mr. Wolfe
Medicine — Dr. Scott
Optometry — Dr. Simpson
Pharmacy — Mrs. Thomas
Physical Therapy — Dr. Scott
Veterinary Medicine — Mr. Carter

COMBINED DEGREE IN ENGINEERING

A cooperative "Three-Two Plan" has been worked out with the University of Kentucky in which the student attends Union College for three years pursuing certain pre-engineering courses in addition to a solid program in liberal arts. At the end of the three years upon the recommendation of Union College, he enters the cooperating university or any accredited engineering school as a junior and in two additional years completes all the requirements for the B.S. degree in Engineering. Both the B.A. or B.S. from Union College and B.S. in Engineering from the cooperating university are awarded at the end of the fifth year.

COMBINED DEGREES IN HEALTH SCIENCES

Students may elect to complete a Bachelor's degree in pre-professional studies at Union College or may arrange for transfer to accredited medical, dental, veterinary medicine, optometry, or medical technology schools for their professional work after three years. On completion of the professional studies, they will also be awarded their Bachelor's degree from Union College. (See the section on Combined Degrees)

SCIENCE EDUCATION MAJORS (SPECIALIZATION FOR HIGH SCHOOL CERTIFICATION)

The following Areas of Concentration are acceptable for the requirements for the specialization component of the Provisional High School Certificate.

I. AREA IN MATHEMATICS-PHYSICAL SCIENCE

The requirements are a total of 48 semester hours with 15 semester hours of chemistry; 15 semester hours of physics numbered 211 and above, including laboratory; 15 semester hours of mathematics numbered 111 and above; 3 semester hours of electives chosen from chemistry and physics numbered 211 and above, or mathematics numbered 111 and above. At least 18 semester hours must be in courses numbered 300 and above. See Department of Education for professional requirements.

II. AREA IN SCIENCE

The requirements are a total of 48 semester hours with 12 semester hours of biology; 12 semester hours of chemistry; 12 hours of physics (numbered 211 and above) including laboratory; environmental studies 350; 9 semester hours of electives chosen from biology, chemistry, or physics (numbered 211 and above). At least 15 semester hours must be in either biology, chemistry, or physics. At least 18 semester hours must be in courses numbered 300 and above. See Department of Education for professional requirements.

BIOLOGY

Requirements for a Major: Thirty semester hours of biology including Biology 131, 132 and sixteen hours chosen from Biology 231, 233, 234, 241, 331, 332, 315, 361; twelve semester hours in chemistry including Chemistry 111, 112, 122; eight semester hours of physics including Physics 111, 112, 213, 214 or the equivalent; and seven semester hours in mathematics or statistics.

Requirements for a Minor: Twenty-one semester hours in biology.

Biology 131. Introductory Biology I **(F) (4) (NS)**
An introduction to some of the fundamental concepts in biology followed by a study of the major groupings of organisms, organic evolution and ecology. Laboratory work dealing with these topics included. Either 131 or General Science 111 but not both may be applied toward the natural science requirement.

Biology 132. Introductory Biology II **(S) (4) (NS)**
A study of energy transformation, organismal physiology, genetics and development. Laboratory work on these topics included. *Prerequisite:* Biology 131.

Biology 151. Medical Terminology **(F) (2) (NS)**
The study of the specialized terminology of biology and medicine.

Biology 231. Invertebrate Biology **(F) (4) (NS)**
A study of the morphology, physiology, ecology, and evolution of the invertebrates. *Prerequisite:* Biology 132. (Odd years only.)

Biology 233. Survey of the Plant Kingdom. **(S) (4) (NS)**
An investigation of the diverse forms of plant life from the bacteria to the flowering plants. Emphasis is on life histories, evolutionary relationships, and diagnostic characteristics. *Prerequisite:* Biology 132. (Even years only.)

Biology 234. Microbiology. **(F) (4) (NS)**
The morphology, physiology, and taxonomy of bacterial and other microorganisms. Their roles in industry; the soil, sewage, water, and air; foods; and disease are considered. Cultivation and observation techniques in laboratory. *Prerequisite:* Biology 132.

Biology 241. Fundamentals of Ecology. **(S) (4) (NS)**
An introduction to ecological studies. The course will acquaint students with the basic interrelationships between organisms and their nonliving environment. Both field and laboratory projects will be undertaken. *Prerequisite:* Biology 131 or General Science III.

Biology 315. Vertebrate Biology. **(F) (4) (NS)**
Lectures will deal with the anatomy, physiology, taxonomy, evolution, distribution, ecology and behavior of vertebrate animals. Laboratories will center on a study of the taxonomy and ecology of species occuring in Southeast Kentucky. *Prerequisite:* Biology 132. (Even years only.)

Biology 321, 322, 323. Field Biology. **(Sum) (4,4,4) (NS)**
A series of courses offered during the summer at the MACCI Biological Field Station on Norris Lake near LaFollette, Tennessee. The courses will vary from year to year. Limnology is usually offered yearly; other possibilities are entomology, forest ecology, and plant taxonomy. *Prerequisite:* Biology 132.

Biology 331. Animal Physiology. **(S) (4) (NS)**
A study of the functions of the organ systems of animals. *Prerequisite:* Biology 132 and Chemistry 112. (Even years only.)

Biology 332. Cell Biology. **(S) (3) (NS)**
A study of structure and function at the subcellular level. Emphasis will be on energy flow, and on synthesis of DNA, RNA, and protein. *Prerequisite:* Biology 132 and Chemistry 112.

Biology 361. Genetics. **(S) (4) (NS)**
Fundamental principles of heredity in plants, animals, and microorganisms. *Prerequisite:* Biology 132 and Chemistry 112. (Odd years only.)

Biology 495. Special Problems. **(F,S) (3)**
An introduction to the methods of scientific research for the advanced student who has demonstrated ability to do independent work in biology. It will consist of a particular problem chosen after consultation with the instructor. A typewritten and bound report may be required. An examination may or may not be given, depending on the nature of the problem. *Prerequisite:* Consent of the instructor.

CHEMISTRY

Requirements for a Minor: Twenty-one semester hours which should include Chemistry 111, 112, and 122.

Chemistry 111. General Chemistry. **(F) (3) (NS)**
Fundamental laws and theories of chemistry from a physical-inorganic viewpoint including atomic structure and the periodic chart, chemical bonding and solutions.

Chemistry 112. General Chemistry. **(S) (3) (NS)**
Second part of General Chemistry. Topics include equilibrium, thermodynamics, kinetics, acid-base chemistry, and electrochemistry.

Chemistry 122. General Chemistry Laboratory. **(S) (3) (NS)**
Laboratory experiments in general chemistry that illustrate basic principles and develop laboratory skills. Experiments on inorganic qualitative analysis are included. Six hours of laboratory per week includes one hour of recitation. *Prerequisite:* Chemistry 111 and concurrent enrollment in Chemistry 112.

Chemistry 212. Quantitative Analysis. **(F) (4) (NS)**
A study of important volumetric and gravimetric analyses presented from a modern theoretical standpoint. Also an introduction to the study of advanced methods of analysis including some newer instrumentation techniques. *Prerequisite:* Chemistry 112, 122.

Chemistry 311-312. Organic Chemistry. **(F,S) (4-4) (NS)**
A thorough course in the chemistry of organic compounds. Unitized laboratory work designed to illustrate the basic principles of organic chemistry. *Prerequisite:* Chemistry 112, 122.

Chemistry 495. Special Problems. **(F,S) (3)**
This is an introduction to the methods of scientific research. The course is designed for the advanced student who has demonstrated ability to do independent work in Chemistry. It will consist of a particular problem decided upon after consultation with the instructor. Upon conclusion of the work a typewritten and bound report-thesis may be required. An examination may or may not be given, depending on the nature of the problem. *Prerequisite:* Permission of the chairman of the division.

ENVIRONMENTAL STUDIES

A minor in environmental studies is sponsored cooperatively by one-quarter of the College faculty representing a dozen disciplines. In The Natural Science Division, professors of biology, geology, and physics are particularly involved, and the environmental program is an integral part of the larger curriculum. The objective of this program is to broaden and enhance the student's academic major, vocational interests, and personal growth.

The environmental minor is flexible and individualized. With the assistance of the Director of Environmental Studies and the major advisor, any student may design a 24 hour curriculum from over fifty hours of instruction in biology, ecology, sociology, health, recreation, ethics, economics, nutrition, geography, education, and special topics such as energy. Among these are independent and off-campus opportunities which are highly recommended. The College operates an environmental education center at Cumberland Gap National Park, where students assist in planning, teaching and other operations. The MACCI Biological Field Station at Norris Lake, Tennessee and the Oak Ridge Associated Universities offer special courses in pond biology, energy, physics, and social science research. The environmental program at Union is also associated with Appalachian Regional Studies, thus emphasizing our own cultural and natural surroundings in many faculty and student projects.

Requirements for the Minor: Twenty-four hours, to be chosen from the following by the student, the Director of Environmental Studies, and the student's major advisor, to best complement the student's curriculum major, vocational interests, and personal growth. (courses listed are also listed under the various departments to which they relate.) The core: Environmental Studies 100, Biology 131, Economics 251, and Environmental Studies 487. The remainder of the courses are to be chosen from the following recommended electives: Biology 241, 315, 321; Sociology 311; Home Economics 341, 361; Recreation 345; Environmental Studies 350, 469; Philosophy 371; Health 421; and certain experimental courses.

Envir. Studies 100. Man and His Environment. **(F) (4) (NS)**
A multidisciplinary discussion of the effects of man's activities in his environment. Specific problems will be identified and their nature explored; field trips will be conducted; independent study projects will be required.

Envir. Studies 350. Man's Geologic and Atmospheric Environment. **(F) (4) (NS)**
A study of the complex processes of the atmosphere and geosphere, with a focus on energy balance, energy exchange, tectonics, resources and entropy. Field and laboratory activities will be included with classroom work. *Prerequisite:* Environmental Studies 100 or a one semester introductory natural science or general science course.

Envir. Studies 469. Appalachian Environmental Workshop. **(Sum) (3-6) (NS)**
A workshop for in-service teachers and mature undergraduates, with emphasis on environmental education and issues. The course treats physical, ecological, cultural and socio-economic aspects of the Appalachian setting.

Envir. Studies 487. Field Practicum in Environmental Studies. **(F,S) (2-4) (NS)**
Must be approved by the Director of Environmental Studies.

GENERAL SCIENCE

Neither a major nor a minor is offered.

Gen. Science 110. Human Biology. **(S) (4) (NS)**
The study of man from a biological point of view. Emphasis on structure physiology, reproduction, and genetics. Laboratory studies are included. This course does not apply toward a biology major.

Gen. Science 111. Fundamentals of Biology. **(F) (4) (NS)**
The topics of ecology, environmental concerns, evolution, and animal behavior will be emphasized. This course does not apply toward a biology major.

Gen. Science 112. Physical Science. **(F) (4) (NS)**
An introductory course dealing with the historical development of science as a human endeavor; observations, model building, science as a process, inquiry, great principles in science using an energy theme, man's relationship to earth and his use of technology to solve environmental problems. *Prerequisite:* High school algebra or mathematics 100.

Gen. Science 114. Introduction to Astronomy. **(S) (4) (NS)**
An introduction to the elements of astronomy. Constellation identification, telescope operation, properties of the moon and planets, solar features, stars, galaxies, and cosmology.

Gen. Science 401. Science: Concepts, Processes and Inquiry. **(S) (3)**
The student will examine the processes of science such as collecting data, measuring, predicting, formulating hypotheses, experimenting, etc. With the laboratory materials from the new science program he will explore their use in teaching children these processes. As materials from such programs as ESS, SCIS, IME, IIS, ISCS, PSSC, PHYSICS, CHEMS., etc., are used, the basic concepts as well as content of science will be reviewed. The inquiry approach to teaching science will be stressed along with individualized instruction, learning theory, laboratory equipment use (commercial and homemade) and multimedia instruction. Natural science credit for education majors only.

MATHEMATICS

Requirements for a Major: Thirty semester hours consisting of mathematics courses numbered 241 and above; Physics 211, 212, 213, and 214.

Requirements for a Minor: Twenty-one semester hours consisting of mathematics courses numbered 203 and above.

Mathematics 100. Elements of Mathematics. **(F) (3)**
This course is intended for students with a weak background in high school Algebra who plan on taking other mathematics courses, elementary statistics, business mathematics, computer science, chemistry, or physical science. The course includes a review of the real number system and topics selected from the following: sets, logic, graphs, algebraic equations, ratio and percent, probability, exponents and radicals, logarithms, and the definition of trigonometric functions.

Mathematics 111. College Algebra and Trigonometry. **(F,S) (4) (NS)**
Basic algebraic and trigonometric definitions and operations; elements of set theory; exponents and radicals; linear, quadratic and trigonometric equations; graphs, functions and inverse functions; use of trig and log tables; radian measure; solution of triangles; probability and permutations. *Prerequisite:* High school algebra or equivalent. Does not count toward major or minor.

Mathematics 203-204. Structure of the Number System. **(F,S) (3-3) (NS)**
Historical development of the numeration system from an intuitive to a logical approach based upon set theory, definitions of the basic operations on whole numbers and their properties extended to integers, rationals, and irrationals; study of why and how of algorithms for all operations; topics in informal geometry.

Mathematics 241. Intro. to Calculus and Analytic Geometry. **(S) (4) (NS)**
Inequalities, the straight line, conic sections, limits, the derivative, differentiation of algebraic functions, applications of the derivative, extrema, and the antiderivative. *Prerequisite:* Mathematics 111 or permission of instructor.

Mathematics 242. Inter. Calculus and Analytic Geometry. **(F) (4) (NS)**
The integral, applications of the integral, logarithmic and exponential functions, trigonometric functions, hyperbolic functions, techniques of integration, L'Hospital's Rule and indeterminate forms, and improper integrals. *Prerequisite:* Mathematics 241.

Mathematics 243. Advanced Calculus and Analytical Geometry. **(S) (4) (NS)**
Topics selected from polar coordinates, vectors, solid analytic geometry, partial differentiation, multiple integration, infinite series, and differential equations. *Prerequisite:* Mathematics 242.

Mathematics 331. Introduction to Linear Algebra. **(F) (3) (NS)**
Vector algebra in Euclidean spaces, lines and planes in space, matrices and linear equations, groups, and rings. *Prerequisite:* Math 111 and the permission of the instructor. (Odd years only.)

Mathematics 332. Linear Algebra. **(S) (3) (NS)**
Vector spaces, subspaces, linear independence, linear transformations, determinants, inner product spaces, orthogonality, and unitary transformations. *Prerequisite:* Mathematics 331. (Odd years only.)

Mathematics 372. Probability and Mathematical Statistics. **(F) (3) (NS)**
Theoretical probability using point set approach; probability as a frequency ratio; probability for finite sample spaces; conditional probability; joint and continuous distributions; binominal distribution; Baye's theorem; statistical applications of probability; theory of sampling and variance. *Prerequisite:* Mathematics 242, which may be taken concurrently, and permission of the instructor. (Even years only.)

Mathematics 402. Functions of a Complex Variable. **(S) (3) (NS)**
Complex numbers, analytic functions, elementary functions of a complex variable, Cauchy's formula, Liouville's theorem, Laurent's series, residues, contour integration, conformal mapping, physical applications. (Even years only.)

Mathematics 403. Introduction to Analysis. **(F) (3) (NS)**
Sets and functions, topological ideas, LUB property, real sequences, continuity, mean value theorems, integration, definite integrals, Taylor's theorems, improper integrals, convergence of infinite series, power series, improper integrals with parameter. (Even years only.)

Mathematics 471. Differential Equations. **(S) (3) (NS)**
Differential equations of first order and first degree, differential equations of first order and higher degree, differential operators and linear differential equations, reduction of order. *Prerequisite:* Mathematics 242. (Even years only.)

Mathematics 495. Independent Study. **(F,S) (3)**
Independent work on topics selected to meet the student's needs. For Mathematics majors only. *Prerequisite:* Senior standing and permission of the instructor.

PHYSICS

Requirements for a Minor: Twenty-one semester hours consisting of physics numbered 211 and above including physics 211, 212, 213, and 214.

Physics 111-112. Elements of General Physics. **(F,S) (3-3) (NS)**
Physics 111-112 is intended for Life Science students and other non-science students. Mechanics of motion and equilibrium; properties of solids, liquids and gases; thermal phenomena; wave motion and vibrations; electricity and magnetism; optics; topics in modern physics. Does not count toward minor. *Prerequisite:* Mathematics 111.

Physics 211. General Physics. **(F) (4) (NS)**
Mechanics of solids, liquids, and gases; laws of thermodynamics; kinetic-molecular theory; vibrating bodies; standing waves; Doppler effect. *Prerequisite:* Mathematics 241, which may be taken concurrently.

Physics 212. General Physics. **(S) (4) (NS)**
Laws of Coulomb, Faraday, Ampere, Ohm, Joule, and Lenz; electromagnetic theory; lenses, prisms, and mirrors; polarization; photo-electric and Compton effects; nuclear energy; waves and corpuscles; relativistic effects. *Prerequisite:* Physics 211.

Physics 213. General Physics Lab. **(F) (1) (NS)**
A general physics laboratory course for both Physics 111 and Physics 211 involving experiments in mechanics, heat and sound. Concurrent enrollment in Physics 111 or Physics 211 required.

Physics 214. General Physics Lab. **(S) (1) (NS)**
A general physics laboratory course for both Physics 112 and Physics 212 involving experiments in electricity, magnetism, optics and modern physics. Concurrent enrollment in Physics 112 or Physics 212 required.

Physics 301. Principles of Modern Physics. **(F) (3) (NS)**
Special relativity, elementary concepts of quantum mechanics, selected topics in atomic and nuclear physics. *Prerequisite:* Physics 212. (Even years only.)

Physics 310. Statics. **(S) (3) (NS)**
Study of force systems on bodies at rest. Applications of the conditions of equilibrium to coplanar and space systems. Virtual work, centroids, moments of inertia, and products of inertia. *Prerequisite:* Physics 212. (Odd years only.)

Physics 311. Heat and Thermodynamics. **(F) (4) (NS)**
Thermodynamics systems and processes, equations of state, PVT surfaces of real substances, laws of thermodynamics, energy equations, enthalphy, entropy, and thermodynamic potentials, applications of thermodynamics to simple systems, kinetic theory. *Prerequisite:* Phys 212, and Math 242. May be taken concurrently. (Odd years only.)

Physics 312. Electricity and Magnetism. **(on demand) (4) (NS)**
Electric charges, forces, field and potential with associated magnetic forces and fields; dielectric theory; capacitance, inductance, resonance, oscillation; series, parallel DC and AC circuits; measuring instruments; thermo-devices, electromagnets; motor and generator principles; transformers; Maxwell's equations and electromagnetic waves. *Prerequisite:* Physics 212 and Math 241.

Physics 495. Independent Study. **(F,S) (3)**

RADIOLOGIC TECHNOLOGY

A joint program in Radiologic Technology has been developed between Union College and Pineville Community Hospital. The program consists of 21 months of course work in math, science, and liberal arts at Union College and clinical work and professional courses in radiologic technology at Pineville Hospital. Upon completion of this part of the program, students will receive the A.S. degree in Radiologic Technology, and begin a six-month internship at Pineville Hospital. At the completion of the internship period, the students are eligible to write the National Registry Examination for certification as Registered Radiologic Technologists.

This program is open to a limited number of students. Applicants to the program must have two units of high school science and two units of high school math. An interview with the faculty in radiology is required for admission to the program.

Curriculum — Radiologic Technology

Freshman year		Fall	January	Spring
English 111, 112	Freshman Composition	3		3
Health 340	Anatomy and Physiology	3		
Biology 151	Medical Terminology	2		
Rad. Tech. 100	Intro. to Radiologic Technology (PH*)	1		
Rad. Tech. 111, 112	Principles of Rad. Exposure I, II (PH)	2		4
Rad. Tech. 121, 122, 123	Rad. Positioning I, II, III (PH)	2	2	3
Mathematics 111	Algebra and Trigonometry			4
Electives**		3		3
Summer				
Rad. Tech. 215	Radiation Protection			1
Rad. Tech. 220	Special Rad. Procedures			2
Rad. Tech. 224	Radiation Therapy			1
Rad. Tech. 225	Nuclear Medicine			2
Sophomore year				
Physics 111, 112	Elements of General Physics	3		3
Physics 213, 214	General Physics Lab	1		1
Rad. Tech. 213, 214	Principles of Rad. Exposure III and IV (PH)	4		2
Rad. Tech. 232	Rad. Positioning IV (PH)	5		
Rad. Tech. 201	Departmental Administration (PH)			1
Rad. Tech. 227	Survey of Diseases (PH)			1
Rad. Tech. 211	X-Ray and Radium Physics (PH)			2
Elective**		3		3

Internship — 25 weeks (PH)

*Taken at Pineville Hospital

**General Studies electives of which 6 hours must be selected from the Humanities and 6 hours from the Social Sciences of which one course must be Psychology 111.

Rad. Tech. 100. Intro. to Rad. Tech. **(F) (1)**

A brief history of the radiologic profession, the basic conduct and ethics of a radiologic technologist, and fundamentals of radiation safety and protection. The course includes a description of hospital office procedures and the administrative organization.

Rad. Tech. 111. Principles of Exposure I. **(F) (2)**

An examination of the theory of x-ray technique and radiographic accessories necessary to produce safe levels of radioactive energies for radiographs. The course includes the developmental process necessary to produce artifact free radiographs.

Rad. Tech. 112. Principles of Exposure II **(S) (4)**

The controlled use of radiation producing equipment The essentials of the radiograph and image formation. Studies relative to the formulation and use of technique charts. The course will include film critique.

Rad. Tech. 121. Radiographic Positioning I **(F) (2)**

A study of body planes and positions. Anatomy and the positioning technique used to demonstrate the anatomical part to be radiographed with emphasis on the extremities, skull, chest, and abdomen. Emphasis will be placed on the surface and marks used to localize body organs.

Rad. Tech. 122, 123. Radiographic Positioning II, III **(Jan, S) (2,3)**

A continuation of Radiologic Technology 121 emphasis on digestive system, urinary system and procedures using contrast media.

Rad. Tech. 201. Departmental Administration. **(S) (1)**
A description of the planning and operation of the Radiology Department. Particular emphasis is placed on work flow, scheduling, inter- and intra-departmental relationships and communication.

Rad. Tech. 211. X-Ray and Radium Physics **(S) (2)**
A study of the fundamental laws of magnetism and electricity as applied to the production of x-rays.

Rad. Tech. 213. Principles of Exposure III. **(F) (4)**
Detailed application of x-ray technique and introduction to radium physics. Study of the radiographs produced by the controlled use of radium.

Rad. Tech. 214. Principles of Exposure IV. **(S) (2)**
A detailed study and critique of the radiographs produced. Independent work from the students will be expected.

Rad. Tech. 215. Radiation Protection. **(Sum) (1)**
Instruction in the benefits and hazards of radiographic equipment and proper use of protective devices.

Rad. Tech. 220. Special Radiographic Procedures. **(Sum) (2)**
This course is concerned with special radiographic and surgical equipment employed in the highly technical investigation of internal conditions. This area of study will include field trips to x-ray departments that have special equipment.

Rad. Tech. 224. Radiation Therapy. **(Sum) (1)**
The use of radiation and radioisotopes sources used for the cure and palliative treatment of disease. Portions of the course will be presented at the University of Kentucky.

Rad. Tech. 225. Nuclear Medicine. **(Sum) (2)**
A specialized field in the use of radionuclides for diagnosis and therapy. This course will contain didactic material plus clinical experience in the Nuclear Medicine Department at Pineville Hospital. Intended to familiarize the student with this rapidly expanding area of medicine.

Rad. Tech. 227. Survey of Diseases. **(S) (1)**
Nursing procedures and techniques used in the general and special care of sick and injured patients in the Radiology Department.

Rad. Tech. 232. Radiographic Positioning IV. **(F) (5)**
A continuation of Radiologic Technology 123 with emphasis on radiographic examination of the thorax and spine.

Division of Social Sciences

Deril K. Mays, *Chairman*
Behavioral Sciences, Psychology, Sociology, Social Work,
History, Geography, Political Science,
and the Appalachian Semester

BEHAVIORAL SCIENCES

The two departmental courses listed below are "core" courses in the Behavioral Sciences curriculum. Both courses are required as a part of the Psychology, Sociology, and Social Work majors and minors.

Behavioral Sciences 245. Statistics for the Behavioral Sciences. **(F) (3)**
An introductory course to prepare students to better understand the scientific analysis of psychological and sociological phenomena. Concepts and principles of descriptive and inferential statistics.

Behavioral Sciences 341. Methods of Behavioral Sciences Research. **(S) (3)**
Techniques of behavioral sciences research, including survey design and the collection, analysis, and interpretation of data. Lecture and laboratory.

PSYCHOLOGY

Requirements for a Major: Thirty semester hours, including Behavioral Sciences 245, 341, Psychology 111, 210, 361, 452 and 460.

Requirements for a Minor: Twenty-one semester hours, including Behavioral Sciences 245, 341, Psychology 111, 210, and 361.

Psychology 111. Introduction to Psychology. **(F,S) (3) (SS)**
Emphasis on the study of human behavior and the ability of the individual to make adjustments to his environment.

Psychology 210. Child Development. **(F) (3) (SS)**
Emphasis on recent child development theories with laboratory experiences with children on a one-to-one basis.

Psychology 361. Psychology of Learning. **(S) (3) (SS)**
Basic concepts and principles of learning with emphasis upon human and animal laboratory studies.

Psychology 402. Counseling Theories and Techniques. **(F) (3)**
Basic theories, types, and techniques of counseling. Practice in individual and group techniques of interviewing. Permission of the Department Head required.

Psychology 411. Educational Psychology. **(F) (3) (SS)**
Basic concepts related to mental development, appraisal and diagnosis, and learning theory applicable to educational practices.

Psychology 430. Social Psychology. **(S) (3) (SS)**
Major emphasis is on problems involved in human relations. Designed to help the individual to understand and adjust to group thought and action. Attention is given to recent psychological and sociological research in human relations.

Psychology 431. Mental Hygiene. **(on demand) (3)**
Factors determining the development of personality, principles of mental health, and problems involved in the dynamics of human adjustment.

Psychology 452. Abnormal Psychology. **(S) (3)**
Mental disorder, changing conceptions of normality, the more common forms of mental disorders, their psychological interpretation, principles of effective mental hygiene, and contemporary approaches to psychotherapy.

Psychology 460. Theories of Personality. **(F) (3) (SS)**
Nature of personality structure and dynamics. Classical psychoanalysis, social psychological, and stimulus-response theories included.

Psychology 461. History and Systems of Psychology. **(on demand) (3) (SS)**
Origins of psychological thought within science and philosophy, tracing the development of systems and theories within German, British, and American psychology.

Psychology 470. Theories of Learning. **(S) (3) (SS)**
Basic fundamentals of learning theory as formulated by such theorists as Thorndike, Pavlov, Guthrie, Skinner, and Hull. Attention is given to the empirical support of various theories.

Psychology 495. Independent Study. **(F,S,Sum) (1-3)**

SOCIOLOGY

Requirements for a Major: Thirty semester hours, including Behavioral Sciences 245, 341, Sociology 131, 460. Psychology 430 is strongly recommended and will be credited toward the thirty semester hour requirement.

Requirements for a Minor: Twenty-one semester hours, including Behavioral Sciences 245, 341, Sociology 131. Psychology 430 is strongly recommended and will be credited toward the twenty-one semester hour requirement.

Sociology 131. Introduction to Sociology. **(F,S) (3) (SS)**
The social interaction of persons and groups; man's cultural heritage and social nature; analysis and principles of group life; forms of collective behavior; the process of socialization; social structure, interaction and reorganization, including race relations and social class; a variety of social institutions; the family, education, religion; the economy and politics; social change.

Sociology 221. Introduction to Anthropology. **(F,S) (3) (SS)**
A survey of the archaeological and biological history of mankind as it relates to the development of man in his culture, with comparisons drawn between the cultures of primitive people and Western Civilization.

Sociology 251. Current Socio-Economic Problems. **(F) (3) (SS)**
Scientific understanding of social problems; problem areas in contemporary American society; types of personal disorders and role impairment; the influences of social change on the structure of society. Attention is also given to the question of why certain forms of deviance become defined as social problems.

Sociology 271. Marriage and the Family. **(S) (3) (SS)**
Background experiences in the lives of young people leading up to courtship and marriage; the establishment and functioning of the home, with related biological and social factors. Emphasis upon changing attitudes toward family relationships, some of the problems involved, and suggested solutions.

Sociology 311. Human Ecology. **(S) (3) (SS)**
Population distribution, growth, composition, and its relevance to current economic, social, and political problems.

Sociology 345. Appalachian Semester Orientation Seminar. **(F,S) (3)**
An introduction to Appalachian culture, including an introduction to the nature of dialects, analyzed from the viewpoint of linguistics and with reference to dialects of Appalachia.

Sociology 349. Economics and Appalachian Poverty. **(F,S) (3)**
A theoretical and empirical study of the economics of poverty in Southern Appalachia with special emphasis on the major economics bases; including an examination of pertinent historical and geographic characteristics.

Sociology 353. Minority Groups. **(on demand) (3) (SS)**
A social scientific study of the origin and organization of minorities and their effect on society, with particular emphasis on minorities in the United States.

Sociology 371. Social Institutions. **(F) (3) (SS)**
An examination of the structure and function of social institutions, with primary orientation within the American milieu. Particular emphasis on socialization, stratification, social change, and relations among institutions. (Odd years only.)

Sociology 421. Rural and Urban Sociology. **(F) (3) (SS)**
Comparative and interrelated study of urban and rural life considering physical, institutional, social and economic factors of modern life in cities and in the countryside.

Sociology 422. Social Institutions in Appalachia. **(F,S) (3)**
A theoretical and empirical analysis of the cultural and social characteristics of the Appalachian Region from an institutional point of view.

Sociology 441. Cultural Anthropology. **(S) (3) (SS)**
Principles and methods of anthropology applied to modern and primitive societies. A cross-cultural survey and analysis of social institutions, religion, art, beliefs, values, and languages of people in industrial and non-industrial societies. A critical analysis of leading theoretical ideas in the field.

Sociology 460. Sociological Theory. **(F) (3) (SS)**
The major theories which have proved useful in investigating the nature of society are examined as cultural products, ideologies, and scientific models. Special attention is given to major figures such as Comte, Durkheim, Weber, Merton, C. Wright Mills, White, and Sorokin in the emergence and convergence of their theoretical development. Lecture and discussion in a seminar setting.

Sociology 461. Criminology. **(S) (3) (SS)**
A theoretical and empirical approach to crime and deliquency. A general survey of juvenile delinquency, corrective institutions, and crime prevention programs. (Odd years only.)

Sociology 472. Sociology of Religion. **(S) (3) (SS)**
A sociological analysis of religious belief systems utilizing the comparative or cross-cultural approach; social aspects of religion; aspects of society; the impact of social and ecological forces upon religious institutions; social origins of religions and denominations and the role of religion in social control and social change. (Even years only.)

Sociology 495. Independent Study. **(F,S,Sum) (1-3)**

SOCIAL WORK

Requirements for a Major: A major will consist of the following forty-three semester hours: Behavioral Sciences 245, 341; Social Work 171, 241, 371, 372, 401; Sociology 131; 251, 460; Psychology 111, 210, and 460. It is recommended social work majors take Economics 153, 353, and Political Science 110 and 212.

Requirements for a Minor: A minor will consist of the following twenty-four semester hours: Behavioral Sciences 245, 341; Social Work 171, 241, 371, 372, and 401.

Requirements for School Social Worker Certificate: Major in Social Work plus Education 241, 351, and 432.

Social Work 171. Introduction to Social Services. **(F) (3)**
Examination of social service agencies in the community and the programs they offer; utilizing agency staff, clientele and where appropriate student volunteer work to develop a philosophy of service.

Social Work 241. Social Welfare as a Social Institution. **(F) (3)**
An analytical study of cultural traditions, value orientations, and political and economic forces which have and are contributing to the continual emergence of social welfare policies and systems in the United States. *Prerequisite:* Social Work 171.

Social Work 371. Social Work Intervention I. **(F) (3)**
An introduction to social work practice theory, utilizing a social systems model of intervention with individual and small groups. Within the model basic social work skills such as professional communication, interviewing, problem identification, purposeful utilization of community resources, purposeful observation and record keeping will be considered. *Prerequisite:* Social Work 241.

Social Work 372. Social Work Intervention II. **(S) (3)**
A continuation of Social Work 371. Social systems models will be used to examine social work intervention with organizations, communities and other large groups. Skills and techniques in organizing, planning and social development will be analyzed from the viewpoint of social work roles and values. *Prerequisite:* Social Work 371.

Social Work 401. Field Instruction. **(S) (6)**
Diversified field instruction, under faculty direction, in agencies, institutions, or with other social systems. Students will spend approximately 16 to 24 hours a week in the field and will attend a regular seminar to coordinate the field and classroom experiences; application should be made in advance to the social work faculty. *Prerequisite:* Major, Social Work 371, and Social Work 372 taken concurrently.

Social Work 402. Specialized Field Instruction. **(on demand) (3-6)**
Intensive field instruction, under faculty direction, in specialized settings to further develop social work skills. This course is optional and should be chosen by students who desire specialized preparation for a specific social service, i.e. school social work, clinical work, and social organizing. *Prerequisite:* Major, Social Work 401 and consent of the Social Work faculty.

Social Work 495. Independent Study. **(F,S,Sum) (1-3)**

PRE-LAW

Most law school admissions committees require a student to have a four-year college program leading to the Bachelor of Arts or Bachelor of Science degree plus an acceptable score on the Law School Admissions Tests. Majors may be in any area although most students tend to take business or social science majors of some type. Students may also elect an individualized major (See Special Programs Section) to prepare themselves for law school. Regardless of the major, elective hours in accounting, business, history, political science, philosophy, and English prove helpful.

HISTORY

Requirements for a Major: Thirty hours of history — History 200 and 15 hours of U.S. History and 12 hours must be non-U.S. History including History 130, and either 331 or 332.

Requirements for a Minor: 21 semester hours — 12 hours must be in U.S. History and 9 in non-U.S. History.

History 101. United States History to 1861 **(F) (3) (SS)**
A survey of American history to the Civil War, tracing the development of the American nation. Stress is placed on the nature of Colonial society; the American Revolution; the creation of a national government; the influence of Jackson, and the Civil War.

History 102. United States History after 1861 **(S) (3) (SS)**
A survey of American history to present times tracing the rise of America as a world power. Emphasis is on the changes of industrialization; the loss of civil rights; protest and reform; the Depression; and American influence in the world.

History 130. Survey of Western Civilization: Ancient through Medieval. **(F) (3) (SS)**

History 131. Survey of Western Civilization: Renaissance to Present. **(S) (3) (SS)**

History 200. Historical Research and Methods. **(F) (3)**
Gathering and criticism of data; bibliographies and aids; problems in historiography, composition analysis, and the final monograph. History majors should take this course in their sophomore year.

History 221. Kentucky History. **(Sum) (3)**
Kentucky from colonial times to the present.

History 241. American Economic History **(S) (3) (SS)**
Examination of the economic forces shaping the development of the American Nation. Topical consideration of mercantilism; the rise of capitalism; slavery; the shocks of industrialization; the New Deal and the economy; and criticism of American economic power and capitalism. (Even years only).

History 311. United States Colonial and Revolutionary Eras (1600-1815) **(F) (3) (SS)**
An examination of the conflicting historical interpretations of these eras. Topics emphasized will be Puritanism; Colonial society; reasons for the Revolution; the meaning of the Constitution; and the nation's early problems. (Odd years only).

History 312.Jacksonian Era & the Civil War (1815-1865) **(S) (3) (SS)**
Emphasis on the conflicting historical interpretations of Jacksonian America and the Civil War. Topics include the Second Political Party System; slavery; expansion; and the cause of the Civil War. (Odd years only.)

History 313. Industrial America (1865-1919) **(F) (3) (SS)**
A consideration of the conflicting historical interpretations of the period. Topics emphasized include the loss of Civil Rights; the nature of the Gilded Age; Populist and Progressive Reforms; and World War I. (Even years only.)

History 323. Latin America. **(on demand) (3) (SS)**
A survey of Latin American history from the discoveries by Columbus to the present with the major emphasis on Mexico and the Caribbean.

History 330. Renaissance and Reformation. Europe (1350-1648). **(F) (3) (SS)**
(Even years only.)

History 331. Early Modern Europe (1648-1815). **(S) (3) (SS)**
(Even years only.)

History 332. Modern Europe. **(S) (3) (SS)**
A history of Europe from 1815 to the present. (Odd years only.)

History 345. American Constitutional History: Civil and Political Rights. **(F) (3) (SS)**
An examination of the influence of the Supreme Court with primary stress given to political and civil rights. Major consideration is the Modern and Warren Supreme Court. (Even years only.)

History 421. The Middle Period (1821-1850) **(F) (3) (SS)**
A detailed examination of Jackson, politics, and the culture of the period. Stress is placed on reform and the predominance of change in American life, and conflicting interpretations of the period. (Even years only.)

History 442. Britain in the 20th Century. **(S) (3) (SS)**
The history of Great Britain since 1900. (Even years only.)

History 446. History of Russia. **(F) (3) (SS)**
The history of Russia since the 17th century. (Odd years only.)

History 470. Recent American History. **(S) (3) (SS)**
Selected topics on the nation's history since 1900, including the New Deal, Viet Nam, and Watergate. (Odd years only).

History 495. Independent Study. **(F,S,Sum) (3)**

POLITICAL SCIENCE

Political Science 110. Critical Issues in American Politics and Government. **(F) (3) (SS)**
A study of selected public policy problems facing Americans in the contemporary political context.

Political Science 311. American National Government. **(S) (3) (SS)**
A study of the structure and function of the national government in theory and practice.

GEOGRAPHY

Geography 101. Introduction to Geography. **(S) (3) (SS)**

Emphasis on the concepts of place, region, spatial interaction, landscape interpretation and landscape evolution. Deals with the graphic media of geography — maps, graphs, scale models. Case studies illustrate geographic principles to familiarize students with various parts of the world. For future teachers as well as students of the natural and social sciences.

Geography 241. Geography of Appalachia. **(F) (3) (SS)**

A systematic analysis of the physical, demographic, economic and cultural characteristics of the Appalachian landscape, with comparative significance for other regions. Includes field study.

APPALACHIAN SEMESTER

W. Sherman Oxendine, *Director*

The Appalachian Semester offers mature students a unique educational opportunity to devote their full time to studying the Appalachian region — its strengths, its problems and its challenges. The program's objectives are to promote in-depth awareness and understanding of life in Appalachia from an interdisciplinary approach and to provide an academic setting for understanding and participating in the dynamics of life in the area. This comprehensive academic program, which includes both classroom and field experience, provides 15 semester hours of credit in a variety of disciplines and offers the student the opportunity to become actively involved in a unique part of American Society.

COURSES

Sociology 345. Appalachian Semester Orientation Seminar **3 hrs.**

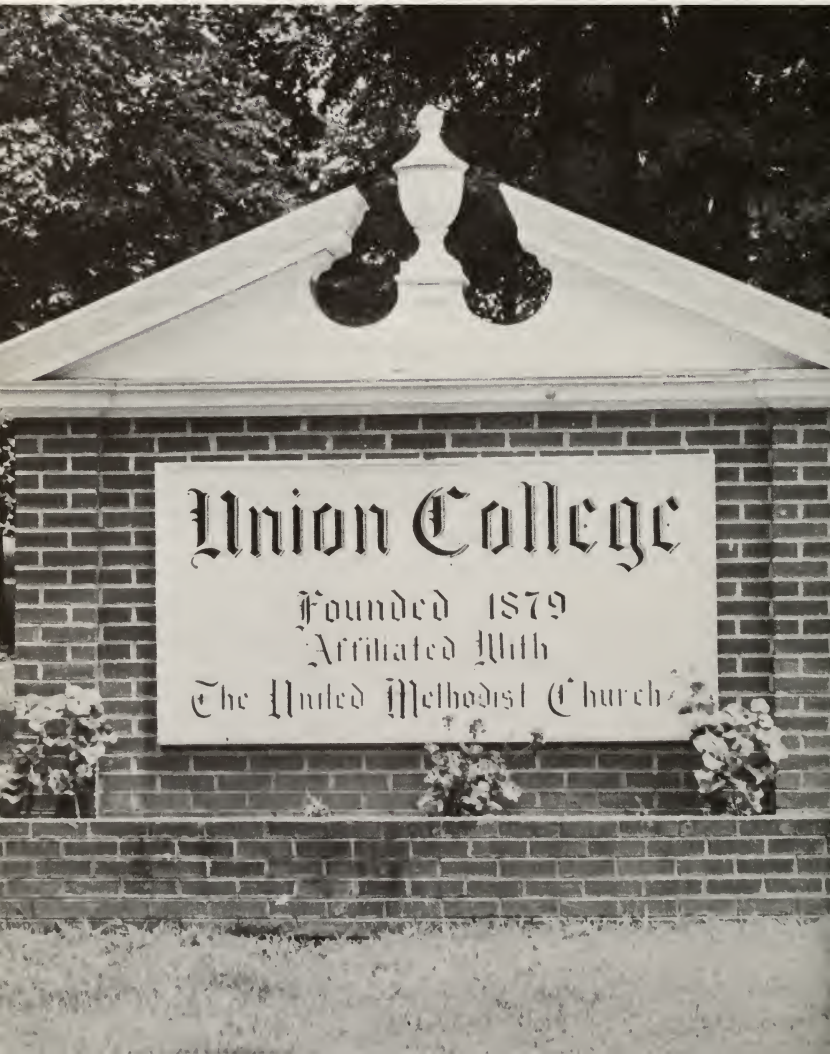
Sociology 349. Economics of Appalachian Poverty **3 hrs.**

Sociology 422. Social Institutions in Appalachia **3 hrs.**

287-487. Appalachian Field Practicum **6 hrs.**

An introductory knowledge of social studies and permission of the director are prerequisites for enrollment in the program. A course in social work methods or in social research methods is highly recommended as a prerequisite for participants desiring upper division field work credit in social work and sociology respectively.

COLLEGE PERSONNEL



General Administration

MAHLON A. MILLER
President of the College
B.S., University of Pittsburgh; M.Div., S.T.M., Drew Theological Seminary; Case Institute of Technology; Western Reserve University; Union Theological Seminary; Zurich University; Tuebingen University; D.D., Union College; L.L.D., Morehead State University

RAYMOND W. GIBSON, JR.
Campus Minister
B.S., Virginia Polytechnic Institute; B.D., M.Div., Candler School of Theology; Emory University; D.Min., Lexington Theological Seminary.

ROBERT J. EPLEY
Director, Office of Institutional Analysis and Planning and Assistant to the President
B.S., M.S., University of Utah

JOE C. HACKER
Director of Data Processing Center
B.S., Union College; M.A., Eastern Kentucky University; University of Georgia; University of Tennessee

WILLIAM WELLS
Management Information System Programmer
Data Processing Schools, U.S. Air Force

Academic Administration

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Vice President for Academic Affairs
B.A., M.A., University of Northern Colorado; Ph.D., University of Iowa

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Assistant Vice President for Graduate Affairs
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CHARLES DIBBLE
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B.S., Union College

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Union College

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Admissions Counselor
B.S., Union College

HAROLD WEST
Admissions Counselor
B.S., Union College

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Admissions Counselor
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Development Officer
B.S. in B.A., Youngstown State University

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MARSHALL B. POTTER
Superintendent of Buildings and Grounds

EUGENE BRANSTUTTER
Assistant Superintendent of Buildings and Grounds

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Business Manager — Treasurer
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CLARENCE H. CHADWELL
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MYRLYN LAWSON
Controller
B.S., Union College

PATTY LAWSON
Director of Purchasing

WILHELMENA MAGEE
Assistant to the Bookkeeper
B.S., Union College

PHYLLIS SEXTON
Clerk, Bookstore
B.S., Union College

MILDRED E. MAGGARD
Student Loan Officer

The Faculty

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B.M., Western Michigan University; M.M., Indiana University; Doctoral Candidate, Indiana University; Pupil of Julius Stulberg, David Dawson, and Otto Wimmler in Strings; Wolfgang Vacano in Conducting

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B.S., M.A. in Ed., Union College

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PLEASE SEND ME INFORMATION ON:

( ) Admission
( ) Financial Aid
( ) Graduate School
( ) Summer School
( ) Appalachian Semester

( ) I would like to talk with a college representative.
( ) I am interested in transferring from another school.

Name_____ Address_____

City, State, Zip_____

Name of High School_____

Date of Graduation_____ Home Phone_____

Academic or Career Interest_____

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City, State, Zip_____

Name of High School_____

Date of Graduation_____ Home Phone_____

Academic or Career Interest_____

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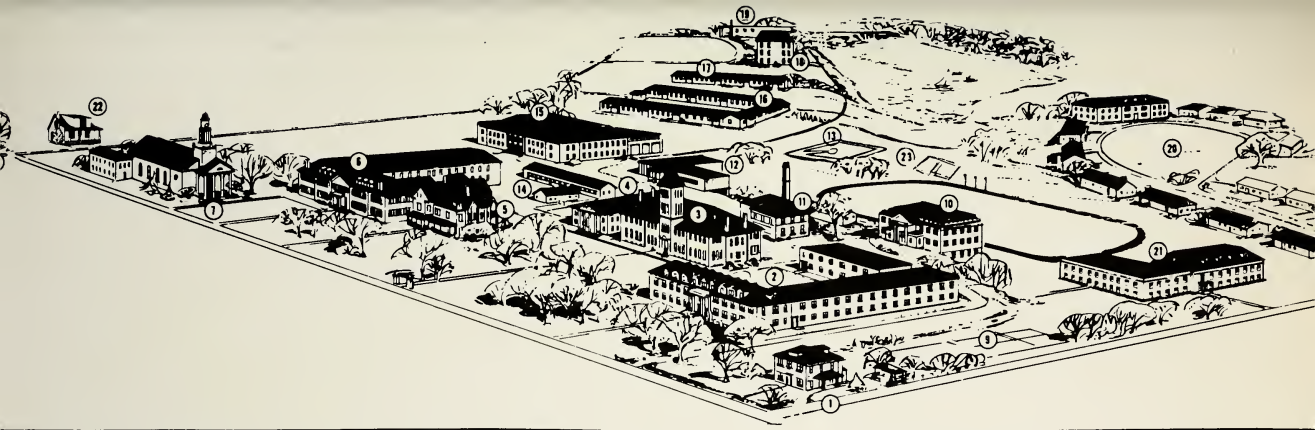
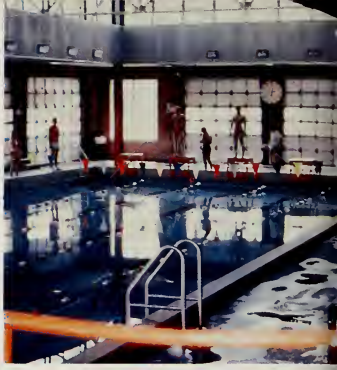
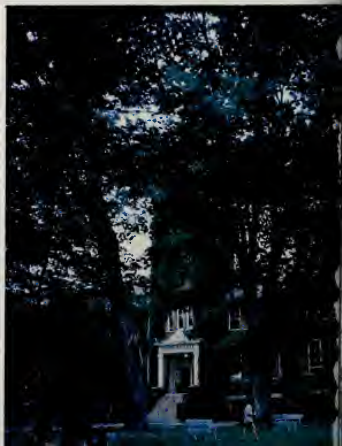


1. Baldwin Place, President's Residence
2. Stevenson Hall, Men's Residence
3. Classroom Building
4. Library
5. Speed Hall, Administration Building
6. Pfeiffer Hall, Women's Residence
7. Conway Boatman Chapel—Fine Arts Building
8. Home Economics Building
9. Tennis Courts
10. Dramatic Arts Center
11. Data Processing
12. Student Center
13. Colonel Sanders Field
14. Religious Life Center
15. Physical Education Building and Swimming Pool
16. College Courts, Married Students' Apartments
17. College Courts Addition
18. Lakeside Hall, Men's Residence
19. Bureau of Mines Education Center
20. College Park, Faculty Housing
21. Mahlon Miller Science Center
22. Manchester Street Building
23. Tennis Courts





UNION COLLEGE

IN KENTUCKY

1977-78 Graduate Catalog

PUBLISHED QUARTERLY
UNION COLLEGE
BARBOURVILLE, KENTUCKY 40906

Entered as a second-class matter at the post office at Barbourville, Kentucky, 40906, under Act
Congress, August 24, 1912.

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TELEPHONE COMMUNICATION

A campus-wide network of telephones enables the caller to reach any administrative or s
office by dialing the central switchboard. After 11 p.m., emergency calls for students may
directed to their dormitory counselor.

Central Switchboard	(606)	546-4151
Counselor, Pfeiffer Hall	(606)	546-3421
Counselor, Lakeside Hall	(606)	546-4849
Counselor, Stevenson Hall	(606)	546-3659

Union College is accredited by the Southern Association of Colleges and Schools, the Kentucky State Department of Education, and approved by the University Senate of the United Methodist Church.

It is the policy of Union College not to discriminate on the basis of sex, race, color, or national and ethnic origin in the admission of students or in its administration of educational programs, scholarships, loan programs, athletic participation, or other school-administered programs. Inquiries should be directed to Mr. Edward Black, Affirmative Action Coordinator.

Mahlon A. Miller,
President of the College

A COLLEGE WITH A MISSION

Union College, affiliated with The United Methodist Church, is a nonsectarian coeduca-
onal institution serving students without regard to race, color, and national or ethnic origin.
he college emphasizes stimulating teaching, and a concern for individual needs and strength of
naracter. Classes are small, the curriculum is flexible, opportunities for counseling and guidance
e abundant, and widespread student involvement in institutional governance aids in the devel-
pment of responsible leadership.

While it is recognized that Union College cannot be all things to all people, the institution
rovides a variety of educational programs. Union College offers the following types of educa-
onal alternaties: updated and restructured liberal arts bachelor's degree programs; professional
nd pre-professional bachelor's degree curricula; Appalachian Regional Studies; occupational-
iented certificate and associate degree programs; master's and Ed.S. degree curricula in educa-
on; and special non-degree continuing education for upgrading occupational skills and/or per-
onal enrichment.

The institution's primary mission is to help improve the quality of life and living conditions
Appalachian by serving the people of Appalachia. The college offers a variety of quality pro-
ams that are attractive to a broad spectrum of students, provides for all students the basis for
nderstanding the distinctive features of Appalachia, provides students with alternative ap-
oaches to learning and acquiring a degree, structures the curricula in such a manner as to im-
ement the career ladder concept, assists students in planning and preparing for life and for ca-
ers, and delivers services directly to the people of the nearby region.

The campus atmosphere stimulates intellectual curiosity and academic competence,
ncourages commitment to Christian ideals, and supports the development of the spiritual, so-
al, and physical resources needed to live creatively and wholesomely in a changing world.

History of the College

Union College was founded in 1879 by a group of progressive citizens of Barbourville who formed a stock company and secured the main part of the present campus. In 1880 the first building was formally opened on the site of what is now known as the Classroom Building.

The college was purchased by the Kentucky Conference of the Methodist Episcopal Church in 1886, and Daniel Stevenson, President of Augusta Collegiate Institute at Augusta, Kentucky was made President of the reorganized institution. A major bequest from Mrs. Fanny Speed led to the construction of Speed Hall, Stevenson Hall, and the Classroom Building.

The college department was discontinued in 1908 and for eight years the institution was maintained as a Junior College, an academy, and an elementary school. It became a bona fide college again in the Presidency of Ezra T. Franklin, who inaugurated a program of development during which the Memorial Gymnasium and a home for the President were built, and the invested funds of the college were materially increased. In 1927 the College was accredited by the University of Kentucky as a four-year college of A grade.

President John O. Gross emphasized the improvement of the curriculum and the building of a strong faculty. His ambition was to see Union College fully accredited. In 1931 it was accredited by the University Senate of the Methodist Episcopal Church, and in 1932 full accreditation was realized when it was made a member of the Southern Association of Colleges and Schools. The Board of Regents of the University of the State of New York placed Union College on its accredited list in 1937. During this administration, land adjacent to the campus was purchased, a maintenance building was erected, and the financial structure was reorganized.

In Conway Boatman's twenty-one years of leadership, the college achieved marked progress in both its educational and plant improvement programs. Seven new buildings were completed and others were enlarged. The curriculum was expanded, endowment funds were increased, and a markedly improved program of faculty salaries and benefits was adopted.

Mahlon A. Miller was elected to the presidency in 1959. In 1960 a Master of Arts in Education degree program was introduced and plant expansion continued with the development of College Park, a faculty residential area, followed by the construction of additional student housing, a physical education building and a student center. The latest addition, a science center, was completed in 1973.

In response to the demand of graduate students, the college began to offer graduate classes in other communities in 1973. This program has since been expanded to serve the needs of in-service teachers in fifteen cities and towns in Southern Kentucky, Northern Tennessee, and Western Virginia.

In 1975, Union College was approved for the offering of the Specialist in Education degree (Ed.S) and Kentucky Rank I certification with the administrator's certificate.

The college has always accepted a special mission to Appalachia, a thrust that is now being strengthened with unique academic programs based on regional characteristics, expanded student financial aid, student community service projects, and new career-oriented curricula. As the college moves toward its centennial, it is expanding and enriching its service to Appalachia while at the same time fulfilling the needs of the many students from other states who come to Union College for an education.

Location of the College

Union College is located in Barbourville, a residential town of 3,500, on U.S. highway 25E midway between Lexington, Kentucky, and Knoxville, Tennessee. The historic Wilderness Road runs along the eastern edge of the campus. Cumberland Gap National Historical Park, the loca-

tion of the Union College Environmental Education Center, is thirty miles away. The Doctor Thomas Walker State Park is four miles from the campus and in adjoining counties are the Cumberland Falls State Park, the Levi Jackson State Park, and the Pine Mountain State Park.

The county seat of Knox County, Barbourville is served by Greyhound buses enroute to Knoxville, Lexington, Louisville, and Cincinnati. The London-Corbin Airport, approximately thirty miles from the campus, is served by the Piedmont Airlines.

On one of the most picturesque campuses of the South, Union College is proud of its Georgian colonial buildings. Shaded by overhanging elms, the red brick buildings give the campus a majestic charm of dignity and beauty.

Graduate students may enroll for a portion of their work at extension centers near their homes. Normally two classes a semester are offered at each location with a wider variety of courses available on campus in the evenings and on Saturday mornings.

Kentucky Centers: Harlan, Hyden, London, Manchester, Middlesboro, and Williamsburg
Tennessee Centers: Clinton, Kingsport, Knoxville, LaFollette, Maryville, Morristown, Newport, and Rutledge
Virginia Center: Coeburn

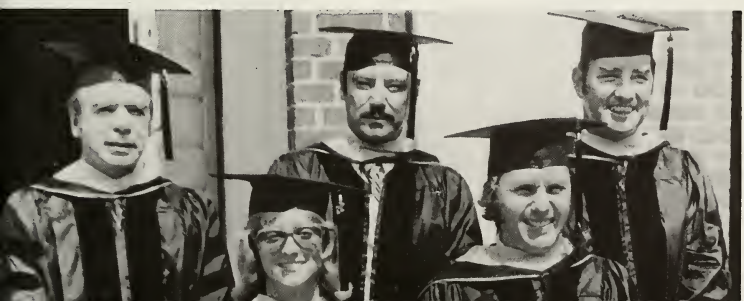
Success of the Graduate School

The Union College graduate programs are designed primarily for in-service teachers in the mid-Appalachian region of Kentucky, Tennessee, and Virginia, although students are attracted from states ranging from New York to Florida and a few foreign countries.

Major factors which draw these students include a flexible program which fits the work schedule of teachers, a dedicated and well trained faculty, a variety of areas of emphasis designed to improve the quality of education, and the individual attention available to each graduate student.

Rank II and Rank I programs which meet Kentucky certification standards for professional advancement are available as well as the traditional degrees of Master of Arts in Education and Specialist in Education.

Union's graduates hold responsible positions in teaching and school administration throughout the Appalachian region



GENERAL INFORMATION

The Library

The Abigail E. Weeks Memorial Library houses a collection of approximately 67,000 volumes. More than 320 periodicals are regularly received, along with indexing services to facilitate their use. It is also a selective depository for U.S. government publications. The stacks are open for use by all students. Regulations governing the use of library materials are available in the library and freshmen students are given instruction in the use of its facilities. At the Environmental Education Center, there is a special collection of more than 500 volumes of new books on environmental concerns. This collection provides materials for environmental courses on the main campus as well as those at the center. In addition, the college houses a special Lincoln-Civil War collection containing over 500 volumes, a curriculum library in the Department of Education, and a music library with a collection of 3,500 recordings and musical scores.

A well equipped Learning Resources Center supplements the printed materials of the Library with films, slides, videotapes, and records. The Center provides educational materials for classes and individualized instruction. A complete videotape studio is scheduled for completion by late 1977.

Special arrangements with local libraries and other colleges in the region, duplication of periodicals, and collections delivered to extention sites insure adequate library resources for off-campus graduate students.

Social Life

Student activity fees are not required of graduate students. Graduate assistants, graduate students living on campus, or those residing near the campus are encouraged to take part in social and cultural functions of the college. Concerts, dances, special speakers, drama productions, movies, and athletic events are available through the purchase of a student activity ticket each semester.

Automobiles

At the time of registration for classes, all students who possess automobiles must complete an automobile registration card. Students who wish to park on campus must pay a $2.00 parking fee and affix a Union College permit. Students must meet minimum insurance requirements as set forth by the Commonwealth of Kentucky.

Housing

Full-time graduate students may elect to live on-campus or to obtain their own facilities in the community. Dormitory rooms are available and may be obtained through contact with the Dean of Students. All students living in the dormitories are required to obtain a boarding ticket and eat in the college dining hall.

A limited number of married student housing apartments are available. Applications should be made in advance with the Business Manager.

CALENDAR 1977-78

FALL SEMESTER 1977

August 30, Tuesday	Undergraduate Registration (Graduate students may also register at this time)
September 3, Saturday	Graduate Registration (9 a.m.) Science Center
September 5, Monday	Graduate classes begin
September 10, Saturday	Last day to add a class or apply for January graduation
October 23-30	Fall Vacation
October 31, Monday	Classes resume
November 26, Saturday	Ed.S Comprehensive Examinations
December 3, Saturday	M.A. Comprehensive Examinations
December 9, Friday	Last day to drop a course with grade of "W"
December 14-17	Final Examinations

JANUARY INTERIM 1978

January 3, Tuesday	Registration and first day of classes
January 20, Friday	Final examinations and last day of classes

SPRING SEMESTER 1978

January 21, Saturday	Graduate Registration (9 a.m.) Science Center
January 25, Wednesday	Graduate classes begin
February 4, Saturday	Last day to add a class or apply for May graduation
March 19-27	Spring Vacation
March 28, Tuesday	Classes resume
April 22, Saturday	Ed.S. Comprehensive Examinations
April 29, Saturday	M.A. Comprehensive Examinations
May 14, Sunday	Commencement
May 18, Thursday	Last day of graduate classes
May 19-June 10	Off Campus Intersession — field work and independent study opportunities

Full-time graduate students living on the campus should consult the undergraduate catalog for dates of dormitory openings and closings and dates of first and last meals served in the dining hall.

SUMMER SESSION 1978

The Summer Schedule will be published in the Spring and will again offer multiple options for the in-service teacher. A regular session, split into two parts, will be offered from mid-June to early August, enabling the students to earn up to 12 semester hours of credit. Special workshops and short sessions will also be offered.

EXPENSES AND FINANCIAL AID

Graduate Expenses

Graduate Tuition, per semester hour	$ 40.00
Activity Card (boarding students only)	10.00
Double dormitory room (per semester)	160.00
Private dormitory room (per semester)	225.00
Board (19 meal week, per semester)	300.00
Board (January Interim)	60.00
Change in Schedule Fee	2.00
Graduate Admission Fee	15.00
Graduation Fee	30.00
Graduation in absentia Fee	25.00
Transcript (after first free copy)	2.00
Married Student Apartment (per month, including utilities)	80.00

Terms of Payment

Full semester's charges, room, board, tuition, and fees, must be paid no later than registration date. Should the student have an approved loan, scholarship, workshop, workstudy grant, or other form of financial assistance, such amount will be deducted from the total charges with the then net amount payable at the time of registration. The Office of Business Affairs can make no exception to this regulation. The college also reserves the right to hold a student's transcript or other academic records until all financial obligations to the school have been satisfied.

Refund Information

Since faculty contracts and other commitments are made by the college for the entire year in advance, the following refund schedule has been established in order that the college and the student may share the loss equitably when it is necessary for a student to withdraw or make a change in his program.

1. There will be no refund given for room rent unless the decision to withdraw is made by the day of registration. This rule applies to all withdrawals including students dismissed from college.
2. Board will be refunded in full amount unused to the date of withdrawal. A full week is charged for any fraction of a week.
3. Tuition will be refunded on the following basis:

   REGULAR TERM — Twenty percent of the total for tuition will be charged for each of the first five weeks. No refunds will be made on tuition after the fifth week. Any part of a week will be treated as a full week. Refund is based on tuition charges, less $10 student center allocation, $1 class dues, and $1 student senate fee.

   SUMMER TERM — Fifty percent of total tuition will be charged the first week and fifty percent the second week. No refunds following the second week. Any part of a week will be treated as a full week.

Any registrant who has completed registration and who has failed to attend a single class may have his account credited for the money paid, this to apply for use on future registration within a twelve-month period.

5. **Room Reservation Deposits** — This deposit will be refunded if the request is made in writing not later than August 1 for the Fall Semester or thirty days before the opening of any other semester for which the contract is first effective. Students, once enrolled, must submit a written request with the Office of Student Affairs at least 30 days before the end of the term for cancellation of the contract. This deposit will be refunded upon receipt of written authorization by the Dean of Students indicating the depositor is no longer enrolled as a student at Union College and that he has left dormitory rooms and equipment undamaged.
6. No fees are returnable.

A student is considered to be enrolled until he formally notifies the Office of the Registrar of his withdrawal and all refunds will be based on the date of notifcation.

Financial Assistance

Limited financial aid and work-study opportunities are available to graduate students who demonstrate financial need as determined by the College Scholarship Service. Applications should be directed to the Office of Financial Aid.

A few graduate assistantships are available for full-time graduate students. Inquiry should be made to the Chairman of the educational divisions of the college or to the Assistant Vice President for Graduate Affairs.

Students eligible for Veteran's benefits should contact the Registrar for information concerning procedures required to receive those benefits.

Safety Workshop on Field Trip

ACADEMIC INFORMATION

Admission to the Graduate School

All applicants for admission to the Graduate School must possess a baccalaureate degree from a regionally accredited four year institution. Applicants for the Ed.S. program are expected to have earned a Master's degree or the equivalent at such an institution.

Applications will be filed on the form provided for consideration for admission and be accompanied by a check or money order for $15. The application fee is waived for Ed.S. applicants who have earned previous graduate credit at Union College.

Two official transcripts of undergraduate and graduate work (if any) must be filed in the Graduate Office no later than the end of the first term of attendance in a Union College class. Failure to supply such transcripts or to meet the academic standards claimed in the application will result in a voiding of credit earned at Union College.

A copy of the teaching certificate held by the applicant noting the areas in which the student is qualified to teach must be filed with the Graduate Office.

An undergraduate grade point average of 2.4 based on a 4 point system is required for unconditional admission.

Applicants with less than the required grade point average or whose transcript shows less than a minor of 21 credit hours in the field of teaching desired on the Master's degree may be admitted conditionally by the Graduate Council on an individual basis. Such students may be given the opportunity of proving their ability to earn a 3.00 grade average in the first 12 hours of graduate credit or required to complete work on the undergraduate or graduate level to reach certification requirements. Such work may be required in addition to the graduate hours required for the degree sought.

Admission to the Graduate School is *not* equivalent to admission to candidacy for the degree.

Residence Requirements

A residence of at least one academic year or its equivalent in summer sessions and/or part-time work is required. Courses taken at Union College extension centers will apply toward the requirement. Although a variety of courses are scheduled for each extension center, no guarantee is made that all requirements can be met at such centers. Most graduate students find that a portion of their work must be completed on the campus in evening, Saturday, or summer classes.

Admission to Candidacy

Admission to candidacy for all degrees and certificates requires formal application to the Office of Graduate Affairs and approval of the Graduate Council when the following requirements have been met:

(1) Shown an aptitude for graduate study by the completion of a minimum of 12 semester hours in residence with a grade point average of at least 3.0 (3.3 for the Ed.S degree)

(2) Satisfied any deficiency in oral or written English that has been reported by a member of the graduate faculty.

(3) Shown evidence of a valid teacher's certificate on the M.A. level or a Kentucky Rank II certificate or its equivalent for the Ed.S or Rank I program.

Time Limits

Students are expected to fulfill the requirements of any graduate degree or advanced certificate within five years from the date of their acceptance into the program. Extension of the time limit to a maximum of eight years may be granted for sufficient reason by the Graduate Council on written petition of the student. No credit earned beyond the time limits may be applied toward a degree or advanced certificate.

Transfer Credit

A maximum of six semester hours from a recognized and accredited graduate school may be transferred toward a Union College degree. Requests for transfer credit must be directed to the Assistant Vice President for Graduate Affairs, be appropriate to the student's planned program, and carry a grade of at least "B."

No credit is allowed toward a graduate degree for courses taken by correspondence or from unaccredited institutions. Transfer credit must have been earned within the five year period prior to graduation (or eight years if permission received from the Graduate Council.)

Planned Program Requirement

Planned programs are required for all graduate students. Each student prepares the list of course requirements for the desired degree with the Assistant Vice President for Graduate Affairs or an advisor appointed by the Graduate Office. The written contract constitutes an agreement leading to the desired degree when completed. The planned program should be accomplished during the first semester of graduate work so that all courses completed meet the college requirements. Any changes in the program must be requested in writing and approved by the Assistant Vice President for Graduate Affairs.

Maximum Credit Loads

The maximum course load for full-time graduate students is fifteen semester hours for a regular semester, six hours per summer term, and three hours for a January Interim. Graduate students engaged in full-time employment are restricted to six semester hours for a regular semester and three hours for a summer term. In exceptional cases, and with the written permission of the employer, advisor, and Assistant Vice President for Graduate Affairs, the limit may be increased to a maximum of nine semester hours during a regular semester and six hours per summer term.

Credit may not be earned concurrently at another graduate institution without the permission of the Assistant Vice President for Graduate Affairs, and then only within the total limits imposed above.

Independent Study

All proposals for independent study must be approved by the Assistant Vice President for Graduate Affairs. It is the student's responsibility to work with a professor in planning the course of study and to present the proposal for approval no later than three weeks prior to the beginning of the semester during which the work is to be accomplished.

Comprehensive Examinations

Comprehensive examinations are required for the M.A. or Ed.S. degrees. They are not required for the award of Rank I or Rank II certificates.

Master of Arts in Education — the candidate will be required to demonstrate his professional growth through three written examinations chosen from the following professional education courses: Education 572, 520 or 530, 441G, 501, 502, and 550.

The examinations are scheduled in July, December, and April of each year. Degree candidates may file an application for the comprehensive examination with the Graduate Office during the semester they complete at least 18 credit hours toward their degree.

Specialist in Education — the candidate will be required to demonstrate his professional growth through a written, essay comprehensive examination after the completion of at least 18 semester hours of the program and at least 15 hours of 600 level courses. The examinations are scheduled in July, December, and April of each year. Degree candidates will receive a list of topics and bibliographic references to aid in preparation for the examination when they make proper application in the Office of Graduate Affairs.

The Marking System and Quality Points

Marks are reported in letters as follows:

A — Represents distinctly superior work, valued at four quality points for each semester hour.

B — Represents above average work, valued at three quality points for each semester hour.

C — Represents average work, valued at two quality points for each semester hour.

D — Represents inferior but passing work, valued at one quality point.

F — Indicates failure with 0 credits and 0 quality points for each semester hour.

W — Indicates that a student withdrew during the first 12 weeks of the semester.

I — Indicates that in the opinion of the instructor the student has not been able to complete the required work of the course due to unavoidable circumstances.

An "I" received at the end of any semester must be removed before the end of the next semester if the student is enrolled for that term. If the student is not enrolled, the "I" must be removed before the end of the 12-month period following the date on which the "I" was received. Any exceptions to the time limit must be made by agreement of the instructor, division chairman, and registrar. If an "I" is not removed within that time limit, it remains on the permanent record and cannot be made up.

A student who does not take final examinations at the end of a semester will be given temporary registration in the next semester within the time allowed for registration. All final examinations for courses which are prerequisite to courses in which the student may be enrolled the next semester must be taken by the end of the registration period. Failure in any of these prerequisite courses will cancel the student's enrollment in the advanced course.

If a course is repeated at Union College, only the second grade is used in the computation of the student's grade point average.

Course Numbering System

Courses numbered 400G are open to graduate students up to a maximum of 15 credit hours. Since these courses are available to advanced undergraduates as well as graduate students, care must be exercised to avoid duplication of courses already taken. Dual credit is not allowed in meeting graduation requirements.

Courses numbered 500 are limited to graduate students. Courses numbered 600 are intended primarily for Ed.S and Rank I certification students, although a limited number of hours may be taken by M.A. candidates with permission of the Vice President for Graduate Affairs.

Interdepartmental Numbers

Some special numbers are reserved for specific types of courses or studies. They may be used by any department offering graduate work although they are not shown in the specific catalog listings.

581 — "Special Topics" — classes developed on a one-time or experimental basis or a special innovative class.
582 Special workshops
583 Television courses through the Kentucky Educational TV Network
595, 695 Independent Study — research on approved topics not found in regular courses — may be repeated on different topics.
599, 699 Graduate Thesis

Aerospace Workshop with Young Observer

DEGREE AND CERTIFICATE REQUIREMENTS

Fifth Year Program Certificate

All new provisional teaching certificates in Kentucky are issued on the basis of a four-year program and a bachelor's degree. These certificates are valid for an initial period of up to ten years and are renewed on "completion of a planned fifth year program of college work." The fifth year requirement applies to all public school teachers and may be met through the completion of an approved Master's program or a special certificate program appropriate to the needs of their teaching assignment.

It is understood that the teachers involved are certified professionals who have already completed one teacher education program. The optional certificate program requires no particular admission standards beyond the bachelor's degree and provisional certificate and completion of the following requirements will satisfy the state requirement and qualify the teacher for Rank II classification under the Foundation Law of Kentucky.

(1) Plan a 32 semester hour of studies with the Assistant Vice President for Graduate Affairs.

(2) Achieve a grade point average of at least 2.25 in this program.

(3) At least 12 semester hours of the program must be in professional education courses, and 12 hours must be in non-professional disciplines.

(4) At least 18 hours of credit must be earned in residence at Union College.

Some credit may be approved on the undergraduate level for the program if such training will strengthen the teacher's performance. No credit will be allowed for correspondence study.

The State Department of Education is considering an option whereby some Continuing Education credit (CEU) and inservice training may be credited toward the certificate. If such action is taken at the state level, Union College will conform to the changes.

Master of Arts in Education

The Master of Arts in Education program is primarily designed for in-service teachers in the public schools. Graduation requirements include the completion of a planned program chosen from the majors following in this section, a minimum grade point average of 3.00, and satisfactory performance on the comprehensive examinations. Candidates should review the catalog section on academic information concerning candidacy, transfer credits, time limits, credit loads, etc. A minimum of 15 credit hours must be earned in courses numbered 500 or higher.

ELEMENTARY EDUCATION PROGRAM (M.A.) (Standard Elementary Certificate and Rank II)

(1) Professional Education ..... 9 semester hours
Education 572 and 520 or 530, and one course chosen from Education 441G, 501, 502, or 550.

(2) Specialization Component ..... 12 semester hours
These non-education courses strengthen the specialization of the elementary teacher and should be chosen carefully within the planned program. The following courses are suggested: General Science 469G, 571, 572, 525, 561; Mathematics 531, 532; Health 451G, 582; Sociology 511; Psychology 431G, 470G

(3) Electives ..... 9 semester hours
May be chosen from any of the above courses or other graduate courses. Students electing to continue their training in administration may use these electives to start an administrative program or strengthen their backgrounds in behavioral science. Education 503 and 468G are strongly recommended.

KINDERGARTEN PROGRAM (M.A.) (Standard Elementary Certificate, Rank II, and Kindergarten endorsement)

(1) Professional Education ..... 9 semester hours
Education 572 and 520 or 530, and one course chosen from Education 441G, 501, 502, or 550.

(2) Kindergarten Component ..... 12 semester hours
Education 440G, 542, and 545.

(3) Electives ..... 9 semester hours
These courses should be selected from the other professional courses in (1) above or from English 401G, 421G; Psychology 431G, 460G, 470G, 452G, 411G; Sociology 511; or Education 468G

READING SPECIALIST PROGRAM (M.A.) (Standard Elementary or Secondary Certificate, Rank II, and Reading Specialist endorsement)*

(1) Professional Education ..... 6 semester hours
Education 572 and one course chosen from Education 441G, 501, 502, or 550.

(2) Specialization Component ..... 12 semester hours
Education 530, 532, 535, and Psychology 525

(3) Reading Specialist Courses ..... 12 semester hours
At least one additional course selected from Section (1) or from Psychology 411G, 470G, or Sociology 511. Remainder from any of these courses or English 421G, 401G, Education 401G, 503, 504, 468G, or Psychology 460G

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*Applicant must have three years successful teaching experience to obtain the Reading Specialist endorsement.

HEALTH PROGRAM (M.A.) (Standard Secondary Certificate and Rank II)

(1) Professional Education ..... 9 semester hours
Education 572 and two courses selected from Education 441G, 501, 502, and 550.

(2) Health Component ..... 12 semester hours
Selected from Health 411G, 421G, 451G, 475G, 511, 541, 551, 582, 595

(3) Electives ..... 9 semester hours
May be selected from areas (1) or (2) above or from other graduate disciplines with approval of the Assistant Vice President for Graduate Affairs.

ENGLISH PROGRAM (M.A.) (Standard Secondary Certificate and Rank II)

(1) Professional Education ..... 9 semester hours
Education 572 and two courses selected from Education 441G, 501, 502, and 550.

(2) English Component ..... 15 semester hours
Education 520 or 530 and four courses chosen from English 401G, 402G, 421G, 490G, 419G, 521, 522, 541, 542, 552, or 595.

(3) Electives ..... 6 semester hours
May be selected from areas (1) or (2) above or from other graduate disciplines with approval of the Assistant Vice President for Graduate Affairs.

SOCIAL STUDIES PROGRAM (M.A.) (Standard Secondary Certificate and Rank II)

(1) Professional Education ..... 9 semester hours
Education 572 and two courses selected from Education 441G, 501, 502, and 550.

(2) Social Studies Component ..... 12 semester hours
Selected from Psychology 402G, 411G, 430G, 431G, 452G, 460G, 461G, 470G, 595; Sociology 421G, 422G, 441G, 460G, 461G, 511, 595; History 421G, 442G, 446G, 470G, 531, 551, 595.

(3) Electives ..... 9 semester hours
May be selected from areas (1) or (2) above or from other graduate disciplines with approval of the Assistant Vice President for Graduate Affairs.

SCIENCE PROGRAM (M.A.) (Standard Secondary Certificate and Rank II)

(1) Professional Education ..... 9 semester hours
Education 572 and two courses selected from Education 441G, 501, 502, and 550.

(2) Science Component ..... 12 semester hours
Selected from Mathematics 531, 532; General Science 401G, 469G, 525, 561, 571, 572; Biology 595.

(3) Electives ..... 9 semester hours
May be selected from areas (1) or (2) above or from other academic disciplines with approval of the Assistant Vice President for Graduate Affairs.

GENERAL EDUCATION PROGRAM (M.A.) (Standard Secondary Certificate and Rank II)

(1) Professional Education ..... 9 semester hours
Education 572 and two courses selected from Education 441G, 501, 502, and 550.

(2) Non-professional Component ..... 12 semester hours
Non-education courses chosen from any graduate discipline as part of the planned program contract to strengthen the academic specialization of the teacher.

(3) Electives ..... 9 semester hours
May be selected from any graduate offerings. Education 468G and 504 are strongly recommended.

ELEMENTARY SCHOOL PRINCIPAL'S PROGRAM (M.A.) (Standard Elementary Certificate and Rank II)

Upon completion of all 45 semester hours listed in this program and three years of successful teaching experience, the principal's endorsement will be granted. Virginia and Tennessee administrators must meet additional requirements shown under the Rank I section of the catalog.

(1) Professional Education ..... 9 semester hours
Education 572 and 520 or 530, plus one course selected from Education 501, 502, or 550.

(2) Specialization Component ..... 12 semester hours
Psychology 411G, Sociology 511, and two courses selected from non-education courses to strengthen the educational background of the student.

(3) Electives ..... 9 semester hours
To be selected from Education 401G, 441G, 503, 555, 571, 575. Education 468G is recommended.

SECONDARY SCHOOL PRINCIPAL'S PROGRAM (M.A.) (Standard Secondary Certificate and Rank II)

Upon completion of all 45 semester hours listed in this program and three years of successful teaching experience, the principal's endorsement will be granted. Virginia & Tennessee administrators must meet additional requirements shown under the Rank I section of the catalog.

(1) Professional Education ..... 9 semester hours
Education 572 and two courses selected from Education 501, 502, or 550.

(2) Specialization Component ..... 12 semester hours
Psychology 411G, Sociology 511, and two courses selected from non-educational courses.

(3) Electives ..... 9 semester hours
To be selected from Education 401G, 441G, 504, 556, 571, and 575. Education 468G is recommended.

SPECIAL EDUCATION PROGRAM (M.A.) (Standard Elementary Certificate and Rank II)

Recipients of this degree will qualify for a standard elementary certificate but **not** an endorsement in Learning & Behavior Disorders at this time. New Kentucky regulations require an extended undergraduate program to qualify for the endorsement and the state has not yet implemented a graduate program. The Special Education hours may be used to meet full state requirements for the provisional certificate in special education.

(1) Professional Education ..... 9 semester hours
Education 572 and 520 or 530 plus one course chosen from Education 501, 502, 550, or 441G

(2) Specialization Component ..... 21 semester hours
Special Education 463G, 465G, 470G, 471G, 565, 566, 590

(3) Electives ..... 6 semester hours
Selected from Education 401G, 440G, Health 541, P.E. 420G, Psychology 525, or Sociology 511.

Rank I Certificate

Kentucky's Rank I Program requires the completion of the Ed.S. degree or a special program of 30 semester hours beyond the Master's level. The 30 hour program must include a minimum of 12 hours of 600 level courses and may include a maximum of 6 hours of 400G level courses.

Each program is specially planned for the student and requires a conference with the Assistant Vice President for Graduate Affairs prior to enrollment. Up to 15 semester hours of credit may be transferred from other graduate institutions if appropriate to the student planned program and carries at least a grade of "B."

A grade point of at least 3.00 is required for certification and no comprehensive examination is required. Correspondence courses, TV courses, workshops, and independent studies may not be transferred into the program.

Although each program is individualized, the following guidelines will prevail in the planning of the program. Some courses may have been taken on the Master's level, and substitute courses required.

ELEMENTARY OR SECONDARY TEACHER (Rank I)

(1) Professional Education ..... 9 semester hours
To include Education 572, 670, and Psychology 411G

(2) Specialization Component ..... 12 semester hours
Non-education courses. Psychology 600 and Special Education 565 are suggested.

(3) Related Fields ..... 9 semester hours
To include Education 503 or 504, 502, or 600. Education 468G and 620 are suggested.

ELEMENTARY OR SECONDARY PRINCIPALSHIP (Rank I and Principal's Certificate for Grades 1-8 or 7-12)

(1) Professional Education ..... 6-9 semester hours
To include Education 572, 441G, 401G, 501, 550, and Psychology 411G. Elementary principalship also requires Education 503, 520 or 530, and 555. Secondary principalship also requires Education 504 and 556.

(2) Specialization Component ..... 9-12 semester hours
To include Sociology 511 or Ed.Ad. 660 and Ed. 575. Suggested courses: Psychology 600, Special Ed. 565, and Ed. Ad. 650, 640, and 630.

(3) Related Field ..... 9-12 semester hours
To include Ed. 502 or 600, 571, and 670.

**Tennessee certification also requires Ed. Ad. 630, 640, and 510. Virginia certification also requires Ed. Ad. 630, 660.

Three years of successful teaching experience at the level of certification is required for the principalship endorsement.

SUPERVISOR OF INSTRUCTION (Rank I and Supervisor's Certificate, Grades 1-12)

Prerequisite: At least 9 credit hours from Education 572, 501, 502, Psychology 470G, 600.

(1) Professional Education ..... 9 semester hours
Education 572, Psychology 411G, and Education 670.

(2) Specialization Component ..... 9-12 semester hours
To include Education 550, 575, Ed. Ad. 660, Psychology 640, and Special Ed. 565. If all are needed, one must be applied to Component (3).

(3) Related Fields ..... 6-9 semester hours
Six hours of reading courses — Ed. 520 or 530, 620 (An undergraduate reading course may substitute for one)
To also include Ed. 503, 504, and 441G.

** Students outside Kentucky should consult appropriate officials in their own states for certification requirements for the position.

Specialist in Education

The Ed.S degree automatically qualifies the recipient for Rank I certification in the state of Kentucky. A planned program is required to include 30 semester hours of work beyond the Master's level, a 3.3 grade average, and satisfactory performance on the comprehensive examination and directed field study.

A minimum of 15 credit hours of 600 level work is required. A maximum of 6 credit hours of 400G work is acceptable toward the degree.

During the semester the student elects to take Education 672, "Advanced Educational Research," a faculty committee for the student must be selected, consisting of the Assistant Vice President for Graduate Affairs and two graduate faculty members appointed by him. Supervision of research and any changes in the planned program must be approved by this committee. Appropriate substitutions will be made when courses have been taken at the Master's level.

ELEMENTARY OR SECONDARY TEACHER (Ed.S and Rank I)

(1) Professional Education ..... 9 semester hours
Education 510, 672, and 687

(2) Specialization Component ..... 12 semester hours
Non-education courses. Psychology 600 and Special Ed. 565 recommended.

(3) Related Fields ..... 9 semester hours
Education 600 and two courses chosen from Component (1) or (2) above.

ELEMENTARY OR SECONDARY PRINCIPALSHIP (Ed.S., Rank I, and Principalship Certificate after 3 years experience at appropriate level)

(1) Professional Education ..... 6-9 semester hours
To include Education 501, 510, 550, 572, 672, & 441G

(2) Specialization Component ..... 9-12 semester hours
To include Sociology 511 or Ed. Ad. 660, Ed. Ad. 630, 640, Education 555 or 556, 575, and 401G. Suggested courses Psychology 600, Ed. Ad. 650, and Special Ed. 565

(3) Related Fields ..... 9-12 semester hours
To include Education 571, 687, 502 or 600, 503 or 504, (Elementary principalship also requires Ed. 520, 530, or 620)

** Virginia requires Ed. Ad. 660 in Component (2)

Students are not eligible for principalship certification unless prior training is at the same level as the desired certification level.

SUPERVISOR OF INSTRUCTION (Ed.S, Rank I, and Supervisor's Certificate (Grades 1-12), after three years of experience at the appropriate level)

Prerequisite: At least 9 credit hours from Education 572, 501, 502, Psychology 470G, 600.

(1) Professional Education ..... 9 semester hours
Education 672, 687, and 510.

(2) Specialization Component ..... 9-12 semester hours
To include Education 550, 575, Ed. Ad. 660, Psychology 640, and Special Ed. 565. If all are needed, one must be applied to Component (3)

(3) Related Fields ..... 6-9 semester hours
Six hours of reading courses — Ed. 520 or 530, 620 (An undergraduate reading course may substitute for one) To also include Education 503, 504, and 441G.

** Students outside Kentucky should consult appropriate officials in their own states for certification requirements for the position.

COURSE DESCRIPTIONS

Each course is offered for three semester hours of credit unless otherwise noted.

BIOLOGY

Biology 595. Research Investigations.
An independent research problem in which the student must demonstrate his ability to employ the scientific method in carrying out an original scientific investigation. A typewritten and bound manuscript will be required. An examination may or may not be given, depending on the nature of the problem selected. *Prerequisite:* Permission of the instructor and approval of the head of the department.

EDUCATION

Education 401G. Introduction to Counseling and Guidance.
Educational, sociological, and psychological foundations of counseling and guidance in schools, colleges and related service oriented agencies. Essential counseling and guidance services, policies, practice and procedures.

Education 440G. Introduction to Early Childhood Education.
Survey of the physical, emotional, mental, and psychological development of the child under six, and the role of the kindergarten teachers in working with such a child.

Education 441G. Measurement and Evaluation.
Instruments and techniques for evaluating abilities, aptitudes, personality traits, and interests will be examined and teacher-made evaluative instruments will be given special emphasis. Application of test results to vocational and educational guidance is to be stressed.

Education 468G. Educational Media.
Gives practice in operating educational media and construction of classroom materials. Emphasis given to educational television use in the classroom.

Education 501. History and Philosophy of Education.
Education in the United States. An analysis of the growth of various educational philosophies and the relation of these to modern educational practice.

Education 502. Curriculum Theory and Development.
Curricula organization, materials, and methods. Techniques for evaluating and constructing curricula.

Education 503. Elementary School Curriculum.
Curricular organization, materials, and methods currently used in elementary schools. Techniques for evaluating and constructing curricula.

Education 504. Secondary School Curriculum.
Curricula organization, materials, and methods currently used in secondary schools. Techniques for evaluating and constructing curricula.

Education 510. Basic Statistics
Designed for aiding Elementary and Secondary school teachers and administrators in their understanding and use of elementary statistical terminology and procedures. A limited set of statistical concepts useful in analyzing data from published research is presented as part of the course.

Education 520. Techniques and Materials for Classroom Reading Instruction.
A foundation course which includes a general review of the following reading skills: Word recognition, comprehension, and fluency. Also, an in-depth study of the various approaches to teaching reading will be included. Students will become familiar with various techniques of instruction, the organization of the reading program, and a variety of reading materials. Simple methods of diagnosis are discussed.

Education 530. Diagnostic and Remedial Procedures in Reading.
Current research findings in diagnostic and remedial procedures in reading. Techniques for applying diagnostic instruments for locating causes of serious reading deficiencies are developed along with suggested remedial procedures.

Education 532. Techniques and Materials for Remedial Reading.
Techniques and materials appropriate to the correction of reading difficulties. *Prerequisite:* Education 530.

Education 535. Practicum in Teaching Reading with Clinic.

Education 542. Fundamentals of Kindergarten Education.
This course focuses primarily on kindergarten curriculum, materials, organization of the kindergarten program, creative experiences for the pre-school child, parent education and home visitation, understanding of families, community resources, planning learning experiences, and evaluation of pupil programs and progress. Direct observation and participation in the kindergarten setting.

Education 545. Practicum in Kindergarten Education. (Six hours credit)
This course offers direct, guided, supervised experiences with kindergarten children under the supervision of a qualified classrom teacher. This course also may be taken at the undergraduate level as part of the required Supervised Student Teaching.

Education 550. Improvement of Instruction Through Supervision.
Democratic school procedures and the methods for improving instruction, evaluation of means, methods, and results of action.

Education 555. The Elementary School Principal.
An analysis of the elementary school building unit as a sub-system within a larger complex organization. Special emphasis on the changes in the role of the elementary school principal as a result of changes in society and in the schools.

Education 556. The Secondary School Principal.
An analysis of the secondary school building unit as a sub-system within a larger complex organization. Special emphasis on the changes in the role of the secondary school principal as a result of changes in society and in the schools.

Education 560. Supervision of Student Teaching.
Experiences deemed necessary for developing students into effective teachers are considered, with attention to participation in teacher-student conferences and planning and executing a work program. *Prerequisite:* One year of teaching experience or consent of the instructor.

Education 561. Internship for the Supervising Teacher. (Two-four hours credit)
A followup course for Education 560, primarily in the field with part time on the campus in seminars, reports of action research with and about student teaching, honors reading, and evaluation. Open only to those who have had Education 560 and who have a student teacher during the course.

Education 571. School Organization and Administration.
Organization of the modern public school, an understanding of such problems as staff-teacher relationships, program of studies, teacher records and reports, personnel and public relations, utlization of teacher time and of physical facilities.

Education 572. Methods of Educational Research.
Types of research, selection of problems, collection and classification of data; organization, presentation, and interpretation of materials.

Education 575. Internship and Seminar in Administration.
A total of 90 clock hours in a practicum situation under a qualified administrator in a public school is required with a written record of experiences. A seminar at end of practicum held on campus. *Prerequisite:* Education 555 or 556.

Education 595. Graduate Independent Study.
Guided study and research toward the solution of specific educational encountered by students. Open to students at 5th year level.

Education 599. Thesis. (by arrangement) (6 hours credit)

Education 600. Advanced Curriculum.
Study of Principles, Practices, and Procedures in current curriculum development and reorganization. *Prerequisites:* Education 502, 503, or 504.

Education 620. Teaching Reading in the Content Field.
Consideration of provisions and procedures for developing reading skills needed at the upper elementary and junior-senior high school level; various types of reading improvement programs, reading tests, and remedial programs at the upper grade levels. *Prerequisite:* Education 520 or 530.

Education 670. Directed Field Project.
Required of all students who are seeking Rank I Certification without Ed. S. degree. The student may work on a special project or problem in his school or school system and may register any term to complete the work within six months from the time of registration.

Education 672. Advanced Educational Research.
Application of appropriate research models, structure of research reports, critique of published research and student's research problem. *Prerequisites:* Education 572, 510.

Education 687. Directed Field Research.
Selection, development, and completion of a practical educational research problem. Required of all Ed. S. candidates. *Prerequisites:* Education 572, 510, 672.

Education 695. Graduate Independent Study.
Guided study and research in area pertinent to the needs of the student at 6th year level.

EDUCATIONAL ADMINISTRATION

EAD 630. School Law.
History of legal provisions for public education in the United States, interpretation and application of present school law — federal and state.

EAD 640. School Business Management.
Federal, state, and local financing of schools, equalization of educational opportunities, sources of school revenue, school budgets, business methods of accounting.

EAD 650. School Plant and Transportation.
Financing, locating, planning, and utilizing school plants; operation and administration of transportation.

EAD 660. School and Community Relations.
An examination of school-community relationships. Special emphasis on leadership roles, operational modes, communication with regard to public school relations.

ENGLISH

English 401G. Modern Grammar.
A survey of modern approaches to the study of language beginning with the structuralist view of linguistic analysis through the theories of generative grammar to the most recent developments in generative semantics. Considerable attention will be paid to the possibilities of practical application of linguistic theory. Even years only.

English 402G. Advanced Composition.
For the student who wishes to become a more competent writer. Research papers, factual narratives, argumentation, and "creative" writing are assigned according to the needs and aptitude of the student.

English 419G. Composition for Teachers.
Review of basic elements of composition with regular writing assignments in both expository and argumentative modes. Techniques of marking and evaluation of student papers. Research techniques, a methodology for teaching students to develop a research paper and practical application of the methodology through the assignment of a research paper as an integral part of the course itself.

English 421G. History of the English Language.
A study of the origins and development of the English language from Anglo-Saxon times to the present. Supplementary readings in early and medieval English history with emphasis on the effects of historical events on language change.

English 490G. Composition for Teachers of English.
Designed to train teachers of secondary school English composition and to indirectly improve the writing of their students. The instructor will utilize the contributions of his colleagues.

English 521. Advanced Study of English Literature, 500-1700.
Intensive study of some phase of English literature within this period. This course may be taken more than once providing that the course content is different. The class schedule will designate the specific content covered.

English 522. Advanced Study of English Literature, 1700-Present.
Intensive study of some phase of English literature within this period. This course may be taken more than once providing that the course content is different. The class schedule will designate the specific content covered.

English 541. Advanced Study of American Literature, 1600-1860.
Intensive study of some phase of American literature within this period. This course may be taken more than once providing that the course content is different. The class schedule will designate the specific content covered.

English 542. Advanced Study of American Literature, 1860-Present.
Intensive study of some phase of American literature within this period. This course may be taken more than once providing that the course content is different. The class schedule will designate the specific content covered.

English 552. Advanced Study in Linguistics.
Intensive study of some phase of linguistics depending on the needs and interests of the study. This course may be taken more than once providing that the course content is different. The class schedule will designate the specific content covered.

English 595. Independent Study in English.
Independent study or research on an approved topic. May be repeated for credit.

GENERAL SCIENCE

General Science 401G. Science: Concepts, Processes, and Inquiry
The student will examine the processes of science such as collecting data, measuring, predicting, formulating hypotheses, experimenting, etc. With the laboratory materials from the new science programs, he will explore their use in teaching children these processes. As materials from such programs as ESS, SCIS, IME, IIS, ISCS, PSSC, PHYSICS, CHEMS, etc., are used, the basic concepts as well as content of science will be reviewed. The inquiry approach to teaching a science will be stressed along with individualized instruction, learning theory, laboratory equipment use (commercial and homemade) and multimedia instruction.

General Science 469G. Environmental Semester.
A course designed for in-service teachers and mature undergraduates with a background or interest in environmental issues. The physical, cultural, ecological, and economic aspects of the environmental issues facing the Southern Appalachians are the highlights. Considerable emphasis will be given to strategies and techniques of environmental education. This is a residence course at the Environmental Education Center, Cumberland Gap National Historical Park.

General Science 525. Science for the Elementary Grades.
Explores the Nature of Science, concepts of science, and Processes of Science. Deals with the production of inexpensive lab materials, inquiry activities, simulation games, and metric system.

General Science 561. Topics in Physical Science.
Enrichment and updating of elementary and high school teachers. Suggested topics: Weather, New Geology, and life of a star.

General Science 571. Aerospace Workshop.
A workshop for teachers offered during the summer session and conducted in cooperation with the National Aeronautics and Space Administration. Lectures and demonstrations given by NASA space scientists on such topics as astronomy, physics, earth science, and biology. No prior knowledge of space science is required and each student is required to develop a teaching unit on space science suitable for use in the grade or subject he teaches.

General Science 572. Space Science Topics.
A follow-up workshop in the summer utilizing the additional services of the U.S. Air Force, Civil Air Patrol, U.S. Weather Service, and other governmental agencies in the development of concepts resulting from space age technology.

HEALTH

Health 411G. Health Education in the Secondary School.
The experience, activities, and instruction of secondary students that lead to intelligent self-direction of health behavior.

Health 421G. Community Health.
The social and cultural factors, the physical environment, and the health agencies and services as they relate to the health of the community.

Health 451G. School and Community Health Workshop.
Reveals the relationship needed between the school and community to promote the total health of the population. Speakers are secured from official agencies, voluntary agencies, professional agencies, sponsored agencies, and other colleges. Small groups are utilized for discussion, field trips, and study through audio-visual aids.

Health 475G. Critical Areas in Health.
Specific health problems confronting society today with particular reference to secondary age students.

Health 511. The School Health Program.
Administrative arrangements found in school health programs and the utilization of administrative techniques and school personnel in conducting an efficient health program.

Health 541. Scientific Foundations of Health Education.
A study of the scientific aspects of health as they relate to personal, family, and community health.

Health 551. Readings in Health
A course enabling the student to research the literature in the area of health, not only to increase his basic knowledge, but to acquaint him with current trends and issues.

Health 582. Safety Workshop.
Accident problems in the home, in the school, at work, and on the highways are discussed with the purpose of being able to influence those who teach by preparing them in the various areas of safety. Groups specialized in a variety of safety areas, such as National Safety Council, American Red Cross, Bureau of Mines, and Kentucky State Police will be utilized.

Health 595. Independent Study.
Independent study in the field of health. Could include practical field experiences.

HISTORY

History 421G. The Middle Period in America (1820-1850)
A detailed examination of Jackson, politics, and the culture of the period. Emphasis is on the Age as one of chaos and concerns the conflicting interpretations of the period.

History 442G. Britain in the 20th Century.
The history of Great Britain since 1900.

History 446G. History of Russia.
The history of Russia since the 17th century.

History 470G. Recent American History.
Selected topics on the Nation's history since 1900.

History 475G. Special Topics in History.
Designed for teachers in special areas of interest.

History 531. The American Revolutionary Era.
The background of the revolution. Continental Congress and the Confederation at work; internal problems and strife; military and naval events; foreign relations; the road to final independence and peace. Even years only.

History 551. Civil War and Reconstruction.
A study of the Civil War and Reconstruction period in American history.

History 595. Independent Study. (by arrangement)

MATHEMATICS

Math 531. Topics in Modern Math for Elementary Teachers.
A study from a theoretical viewpoint of some topics in mathematics that are taught in elementary school. The course will begin with a study of logic and include topics selected from sets; arithmetical operations on the whole numbers, the integers, rational numbers and real numbers; numeration systems; some elementary number theory; measurement; other topics in informal geometry. This course is the required course for a graduate student wishing endorsement of his high school certificate. Credit will not be granted for this course to a student who has completed both Math 203 and 204.

Math 532. Modern Math Laboratory.
An active involvement in laboratory experiments with multibase blocks, sets, Cuisenaire rods, geoboards, etc.; development of skills in the production and use of place value charts, math balance, fraction bars, games, etc.; creation of a mathematics learning center for the classroom along with the appropriate activity cards for each module. *Prerequisite:* Math 531, or Math 203, 204.

PHYSICAL EDUCATION

Physical Education 420G. Adaptive Physical Education.
Health conditions which require the physical education and recreation programs to be adapted to meet the special needs of individuals with handicapping conditions.

PSYCHOLOGY

Psychology 402G. Counseling Theories and Techniques.
Basic theories, types, and techniques of counseling. Practice in individual and group techniques of interviewing.

Psychology 411G. Educational Psychology.
Basic concepts related to mental development, appraisal and diagnosis, and learning theory applicable to educational practices.

Psychology 430G. Social Psychology.
Major emphasis is on problems involved in human relations. Designed to help the individual to understand and adjust to group thought and action. Attention is given to recent psychological and sociological research in human relations.

Psychology 431G. Mental Hygiene.
Factors determining the development of personality, principles of mental health, and problems involved in the dynamics of human adjustment.

Psychology 452G. Abnormal Psychology.
Mental disorder, changing concepts of normality, the more common forms of mental disorders, their psychological interpretation, principles of effective mental hygiene, and contemporary approaches to psychotherapy.

Psychology 460G. Theories of Personality.
Nature of personality structure and dynamics. Classical psychoanalysis, social psychological, and stimulus-response theories included.

Psychology 461G. History and Systems of Psychology.
Origins of psychological thought within science and philosophy, tracing the development of systems and theories with German, British, and American psychology.

Psychology 470G. Theories of Learning.
Basic fundamentals of learning theory as formulated by such theorists as Thorndike, Pavlov, Guthrie, Skinner, and Hull. Attention is given to the empirical support of various theories.

Psychology 525. Psychology of Reading.
Theory and applications of learning principles as applied to the reading processes. Major emphasis relates to respondent, operant, and perceptual learning paradigms.

Psychology 595. Independent Study.

Psychology 600. Advanced Human Growth and Development.
Psychological development from birth to maturity. Emphasis upon the principal concepts and problems in the development of the individual.

Psychology 640. Group Processes.
A study of theory and practice in group dynamics. The process and implications of group processes, group counseling, and the human potential orientation are explored.

SOCIOLOGY

Sociology 421G. Rural and Urban Sociology.
Comparative and interrelated study of urban and rural life considering the physical, institutional, social, and economic factors of modern life in citites and in the countryside.

Sociology 422G. Social Institutions in Appalachia.
A theoretical and empirical analysis of the cultural and social characteristics of the Appalachian Region from an institutional point of view.

Sociology 441G. Cultural Anthropology.
Principles and methods of anthropology applied to modern and primitive societies. A cross-cultural survey and analysis of social institutions, religion, art, beliefs, values, and languages of people in industrial and non-industrial societies. A critical analysis of leading theoretical ideas in the field.

Sociology 460G. Sociological Theory.
The major theories which have proved useful in investigating the nature of society are examined as cultural products, ideologies, and scientific models. Special attention is given to major figures such as Comte, Durkheim, Weber, Merton, C. Wright Mills, White, and Sorokin in the emergence and convergence of their theoretical development. Lecture and discussion in a seminar setting.

Sociology 461G. Criminology.
A theoretical and empirical approach to crime and delinquency. A general survey of juvenile delinquency, corrective institutions, and crime prevention programs.

Sociology 511. Educational Society.
Analysis of educational institutions in terms of the interaction of individuals and groups, educational processes, school and community relations, and the function of the educator as an agent of socialization.

Sociology 595. Independent Study.

SPECIAL EDUCATION

Special Education 463G. Speech and Language Disorders.
Theoretical approaches to language and speech development. Etiology of speech and language disorders, therapeutic methods.

Special Education 465G. Principles of Behavior Management.
Theoretical framework and application of behavior modification techniques; alternative methods of classroom management utilizing operant methods.

Special Education 470G. Educational Assessment of Children with Learning and Behavior Disorders.
Administration and interpretation of diagnostic instruments; construction of informal teacher assessment tools; assessment of learning and behavior traits of L/BD children.

Special Education 471G. Prescriptive Teaching of Children with Learning and Behavior Disorders.
The designing, implementation and evaluation of individualized programs based upon the educationally relevant characteristics of L/BD children.

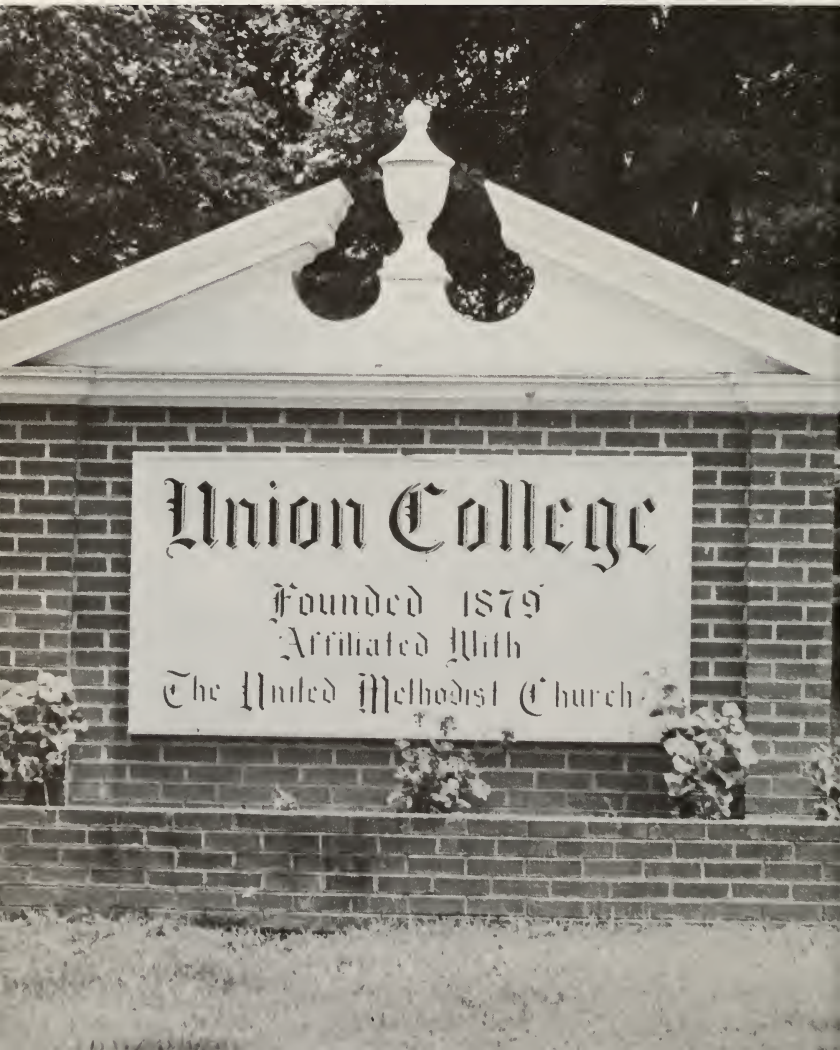
Special Education 565. Psychology of Exceptional Children.
Survey course of children with special educational needs. The nature, cause and intervention of exceptionality.

Special Education 566. Counseling Parents of Children with Learning and Behavior Disorders.
Counseling theories and techniques of specific value for working with parents of handicapped children; practicum experiences.

Special Education 590. Practicum: Children with Learning and Behavior Disorders.
Supervised field experiences, designed according to individual student needs.

Elementary Education Art Workshop

COLLEGE PERSONNEL



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H. Warren Robbins, Ed.D. ..... *Ass't. Vice President for Graduate Affairs*
Robert E. Rose, Ph.D. ..... *Vice President for Academic Affairs*
Edwin LeMaster, M.A. ..... *Registrar*

Graduate Council

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Allan E. Green ..... *Chairman, Division of Humanities*
Frances Patridge ..... *Chairman, Division of Applied Sciences*
Robert J. Simpson ..... *Chairman, Division of Natural Sciences*
Dwight C. Stewart ..... *Professor of Philosophy*
Lester G. Woody ..... *Associate Professor of English*
Arthur H. Hafner ..... *Head, Department of Education*

Graduate Faculty

James H. Barton, *Assistant Professor of Environmental Studies*
M.S., Memphis State University; Doctoral Candidate, University of Northern Colorado.

John H. Boyd, *Professor of Education*
Ed.D., University of Kentucky

Robert D. Bryant, *Professor of Sociology*
Th.D., Boston University

Clevis D. Carter, *Assistant Professor of Physical Sciences*
M.A., George Peabody College

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Ph.D., Stanford University

Jan M. Finkel, *Assistant Professor of English*
Ph.D., Indiana University

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Ed.D., Teachers College, Columbia University

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Ph.D., University of Kentucky

Larry D. Klein, *Assistant Professor of History*
M.A., University of Nebraska; Doctoral Candidate, University of Kentucky

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Ed.D., University of Tennessee

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Ed.D., University of Alabama

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Ed.D., University of Tennessee

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Ph.D., Auburn University

Robert J. Simpson, *Associate Professor of Mathematics*
Ph.D., University of Tennessee

Karla Kay Smith, *Assistant Professor of Education*
M.A. and Supervision Certificate, Eastern Kentucky University

Dwight C. Stewart, *Professor of Philosophy*
Ph.D., Northwestern University

Lester G. Woody, *Associate Professor of English*
Ph.D., University of North Carolina

Adjunct Graduate Faculty

EDUCATION

William B. Biddle	Ed.D., East Tennessee State University
Robert L. Gatton	Ed.D., University of Florida
Robert Hayes	Ed.D., University of Alabama
Wayne Quinton	Ed.D., Duke University
Kenneth P. Scott	M.A. and Doctoral Candidate, East Tennessee State University
James Stamper	Ed.D., University of Tennessee
David Wetzel	M.A., East Tennessee State University
Dan G. Wilder	Ed.D., East Tennessee State University

PSYCHOLOGY

Richard Gaynor	Ph.D., Mississippi State University
John Yatros	Ed.D., Indiana University

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UNION COLLEGE
Barbourville, Kentucky
APPLICATION FOR GRADUATE STUDY

This application, TWO official transcripts of the applicant's academic record, a copy of their teaching certificate, and the Admission Fee of $15 should be mailed to the Assistant Vice President for Graduate Affairs, Union College, Barbourville, Kentucky at least thirty (30) days prior to the beginning of the semester or summer school session in which entrance is proposed. The applicant's transcripts must be sent directly to the Graduate School from the institution where the degree was received. Applicants holding the baccalaureate degree or a Master's degree from Union College need not submit these transcripts.

MISS
MR.
MRS.

_____ Date _____
Last Name First Name Middle Name

Spouse _____ Mrs. Maiden Name _____
Last Name First Name Middle Name

Home Address:

_____
Street and Number City State Zip Code

(A.C.) _____ (A.C.) _____
Home Telephone School Telephone Social Security Number

Place of Birth _____ Date of Birth _____

State of Health _____

High School Attended: _____ Date of Graduation _____

Colleges or Universities Attended:

Undergraduate: Dates Degrees

_____

_____

Graduate: Dates Degrees

Undergraduate Major: _____ Second Major or Minor: _____

Do you expect to complete your graduate work at Union College?

When do you plan to begin your graduate work?

Program of study you plan to pursue: [ ] M.A. [ ] Ed.S. [ ] Rank I [ ] Rank II

Do you hold a valid professional teaching certificate? Yes _____ No _____

What State: _____ Kind of Certificate: _____ Certificate No. _____

For What Grades _____ For What Subjects: _____

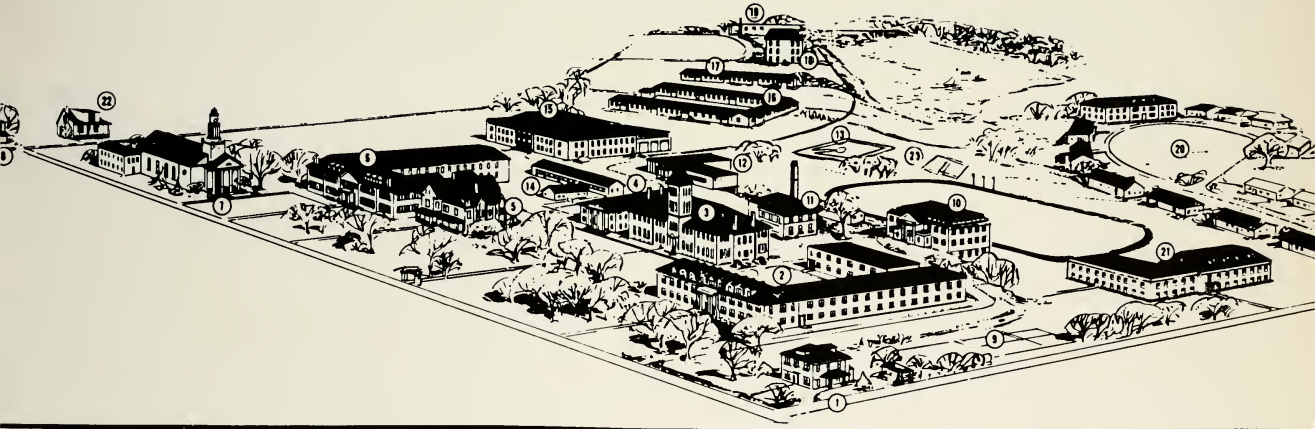
I certify that the above statements are correct and complete to the best of my knowledge.

Signed _____ Date _____

.....(DO NOT WRITE BELOW THIS LINE.).....

Application approved _____ Application rejected _____ Date _____

_____ Assistant Vice President for Graduate Affairs



1. Baldwin Place, President's Residence
2. Stevenson Hall, Men's Residence
3. Classroom Building
4. Library
5. Speed Hall, Administration Building
6. Pfeiffer Hall, Women's Residence
7. Conway Boatman Chapel—Fine Arts Building
8. Home Economics Building
9. Tennis Courts
10. Dramatic Arts Center
11. Data Processing
12. Student Center
13. Colonel Sanders Field
14. Religious Life Center
15. Physical Education Building and Swimming Pool
16. College Courts, Married Students' Apartments
17. College Courts Addition
18. Lakeside Hall, Men's Residence
19. Bureau of Mines Education Center
20. College Park, Faculty Housing
21. Mahlon Miller Science Center
22. Manchester Street Building
23. Tennis Courts

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